AGRICULTURE
ANNUAL REPORT
1988 · 1989

Alberta
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90-06068/

ALBERTA AGRICULTURE'S ANNUAL REPORT
1988-89

TO HER HONOUR THE
HONOURABLE HELEN HUNLEY
Lieutenant-Governor of the Province
of Alberta

Madam:

We have the honor to submit the annual report of Alberta Agriculture for the fiscal year ended March 31, 1989.

Respectfully,

ERNIE ISLEY Minister of Agriculture	**SHIRLEY McCLELLAN** Associate Minister of Agriculture

ALBERTA AGRICULTURE'S ANNUAL REPORT
1988-89

HONOURABLE ERNIE ISLEY
Minister of Agriculture

HONOURABLE SHIRLEY McCLELLAN
Associate Minister of Agriculture

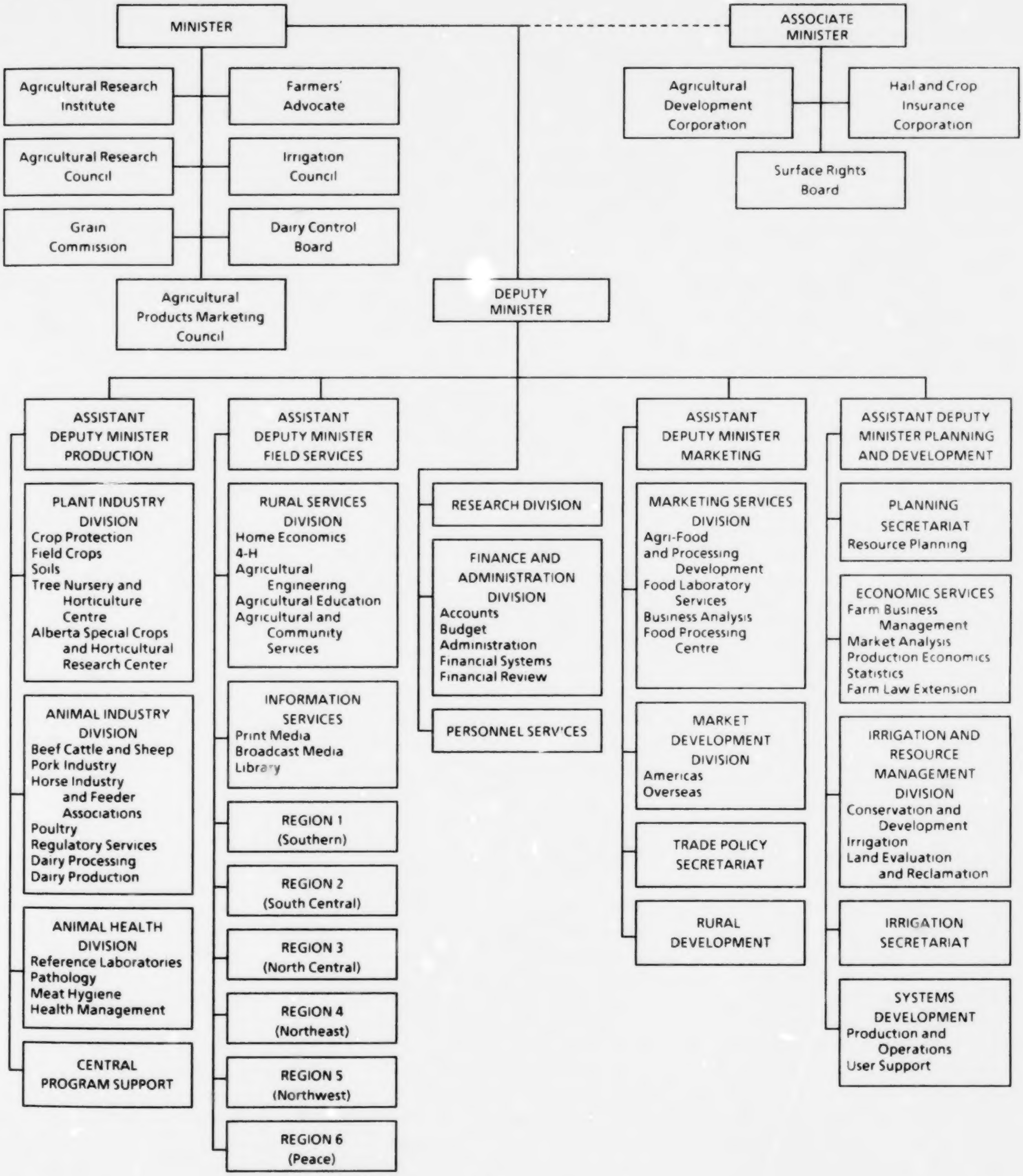
Sir and Madam:

I have the honor to submit the annual report of Alberta Agriculture for the fiscal year ended March 31, 1989.

Respectfully,

H.B. McEwen
Deputy Minister

Organizational Chart


MINISTER
ASSOCIATE MINISTER
Agricultural Research Institute
Farmers' Advocate
Agricultural Research Council
Irrigation Council
Grain Commission
Dairy Control Board
Agricultural Products Marketing Council
Agricultural Development Corporation
Hail and Crop Insurance Corporation
Surface Rights Board
DEPUTY MINISTER
ASSISTANT DEPUTY MINISTER PRODUCTION
PLANT INDUSTRY DIVISION
Crop Protection
Field Crops
Soils
Tree Nursery and Horticulture Centre
Alberta Special Crops and Horticultural Research Center
ANIMAL INDUSTRY DIVISION
Beef Cattle and Sheep
Pork Industry
Horse Industry and Feeder Associations
Poultry
Regulatory Services
Dairy Processing
Dairy Production
ANIMAL HEALTH DIVISION
Reference Laboratories
Pathology
Meat Hygiene
Health Management
CENTRAL PROGRAM SUPPORT
ASSISTANT DEPUTY MINISTER FIELD SERVICES
RURAL SERVICES DIVISION
Home Economics
4-H
Agricultural Engineering
Agricultural Education
Agricultural and Community Services
INFORMATION SERVICES
Print Media
Broadcast Media
Library
REGION 1 (Southern)
REGION 2 (South Central)
REGION 3 (North Central)
REGION 4 (Northeast)
REGION 5 (Northwest)
REGION 6 (Peace)
RESEARCH DIVISION
FINANCE AND ADMINISTRATION DIVISION
Accounts
Budget
Administration
Financial Systems
Financial Review
PERSONNEL SERVICES
ASSISTANT DEPUTY MINISTER MARKETING
MARKETING SERVICES DIVISION
Agri-Food and Processing Development
Food Laboratory Services
Business Analysis
Food Processing Centre
MARKET DEVELOPMENT DIVISION
Americas
Overseas
TRADE POLICY SECRETARIAT
RURAL DEVELOPMENT
ASSISTANT DEPUTY MINISTER PLANNING AND DEVELOPMENT
PLANNING SECRETARIAT
Resource Planning
ECONOMIC SERVICES
Farm Business Management
Market Analysis
Production Economics
Statistics
Farm Law Extension
IRRIGATION AND RESOURCE MANAGEMENT DIVISION
Conservation and Development
Irrigation
Land Evaluation and Reclamation
IRRIGATION SECRETARIAT
SYSTEMS DEVELOPMENT
Production and Operations
User Support

March 31, 1989

HIGHLIGHTS

- The planning secretariat prepared reports on the Crow Benefit payment mechanisms, assessed the effect of the pay the producer proposal and participated in the preliminary development of a joint proposal that would pay the Crow Benefit to producers in Alberta.
- Thirty-six Gear Up Financially courses were attended by 391 farm units throughout the six regions. In-depth financial counselling was provided to 327 farm families.
- Funding and planning were put in place for a Canada-Alberta farm management training and advisory program, ensuring that farm managers would have access to these programs.
- Plans for a Canada-Alberta soil conservation initiative were developed.
- The Alberta private irrigation development assistance program was implemented to assist producers install the capital works required to bring water to private irrigation projects.
- Sixty-five applications for assistance under the farmland development and reclamation program were received. The program emphasized on-farm demonstrations of water retention and storage.
- During the year, 3,538 Alberta farm credit stability loans were advanced by financial institutions for a total of $220 million at a fixed interest rate of 9 per cent. Program enrichments were announced March 1, 1989, extending the program and increasing the per farm family borrowing limit to $250,000.
- A major effort to stem the advance of virulent blackleg of canola was initiated. A government sponsored seed testing program ensured clean, disease-free seed for 1989.
- The Animal Protection Act was amended to provide greater ability to deal with the suffering and abuse of animals and significantly increase penalties for violations.
- Inspections under The Alberta Meat Inspection Act increased by over 20 per cent for pigs and 15-18 per cent for poultry.
- A total of $18.7 million in matching premiums was provided to Alberta producers enrolled in the national tripartite stabilization programs for red meat and specialty crops. Stabilization payments made to Alberta producers totalled $102 million.
- Herbs, spices and essential oil crops are new crops which the department has helped develop in Alberta.
- Feeder Associations purchased 262,000 head of cattle valued at $162 million.
- The market development division, in conjunction with the Alberta Food Processors Association, introduced "The Opportunity is Now" program to assist food processors market their products within Alberta.
- Alberta's agricultural and food exports to the United States increased to $597 million in 1988, an increase of 36 per cent from the previous year.
- The formation of the Beef Export Federation facilitated a co-ordinated effort in penetrating new markets, and will provide a commitment of qualtiy and reliabiltiy in foreign markets.
- The marketing services division made contact with approximately 375 potential food processors who were seeking advice and guidance.
- Staff assisted over 100 Alberta food processors and responded to 125 project requests for new or improved product development
- The trade policy secretariat was involved in making more than 60 presentations on the Canada-U.S. Free Trade Agreement, the Multilateral Trade Negotiations and other trade policy issues.
- The severe need for water in 1988 necessitated the development of a water supplies assistance program, in co-operation with three other provincial departments. There was an overwhelming response of 12,400 applications to this program.
- The demand for *A Child's Guide to Farm Safety* exceeded 55,000 copies. Two hundred and two farm safety workshops, seminars and special programs were conducted province wide with approximately 8,000 farmers, farm families and farm workers attending.
- Operating grants to 252 Agricultural Societies totalled 1,363,880 and 175 fair grants totalled $2,60,513.
- Two hundred and eighty-one *Call of the Land* programs were produced and aired on 15 AM and 8 FM stations to a daily listening audience of over 55,000.
- One hundred and fourteen new and revised technical publications were issued for farmers and their families.
- The Russian wheat aphid was a new concern found in southern Alberta in mid-summer. Field monitoring for this pest was a priority for both farmers and staff.
- More than 2,500 volunteer leaders, supported by the 4-H branch, delivered the 4-H program to over 7,000 members in 456 4-H clubs.
- The Farming fo the Future agricultural research funding program supported 100 research projects and 167 on-farm demonstration projects with a total allocation of approximately $4.5 million.
- The Alberta Agricultural Research Institute implemented two new research assistance programs: the research co-ordination program and the matching grants program. Institute approved 36 projects under this program at a total allocation of $832,000.

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ALBERTA HAIL AND CROP INSURANCE CORPORATION[1]

The Alberta Hail and Crop Insurance Corporation was established by authority of the Hail and Crop Insurance Act (1969), which provided for the merger of the Alberta Hail Insurance Board and the Alberta Crop Insurance Corporation. During the 1988-89 fiscal year it provided protection against crop losses under its hail insurance, "all-risk" crop insurance and forage insurance programs.

Hail Insurance

In 1988, despite low prices for grain crops at the beginning of the season and the generally dry conditions prevailing during May and June, farmers placed more hail insurance on their crops than in the preceding year. The extent of hail damage was considerably below the long-term average, with a loss-to-premium ratio of 49.4 per cent compared to the long-term average of 71 per cent. The corporation paid a premium refund of 30 per cent to policyholders who did not claim for hail loss and a 15 per cent refund to those who received indemnities.

Following is a comparison of business and experience for the last two years:

SUMMARY OF HAIL INSURANCE PROGRAM

	1988	1987
Policies	8,182	7,948
Acres insured	2,882,890	2,912,719
Risks	$201,009,884	$194,895,719
Premium	$14,448,447	$13,359,511
Indemnities	$7,138,602	$8,639,603
Loss-to-premium ratio	49.4 %	64.7%

All-Risk Crop Insurance

The southern and eastern regions of Alberta were extremely dry throughout the growing seasons and suffered heavy crop losses. Central and northeastern regions were unusually dry in the spring but had ample moisture beginning in mid-June. The result was uneven germination with significant second growth. A long, open fall enabled these crops to ripen and a reasonable harvest was taken off in these areas.

Some serious flooding problems occurred in parts of the Peace River area, but the main cause of loss in 1988 was drought in southern and eastern parts of the province.

Participation increased about eight per cent over the previous year, but slightly higher insured values meant an increase in the amount of insurance carried of some 15 per cent.

The major change to the program for 1988 was an emphasis on the individual coverage option. As a result, participation in this option increased to about 4,500 from approximately 400.

Following is a summary of business for 1988, with a comparison of 1987:

SUMMARY OF ALL-RISK INSURANCE PROGRAM

	1988	1987
Policies	26,920	24,984
Acres insured	11,429,125	10,577,696
Beehives insured	58,090	94,786
Crop insurance coverage	$691,639,083	$599,846,199
Hail endorsement coverage	$578,050,615	$507,086,681
Premium	$116,768,572	$100,751,042
Indemnities		
Basic policy	$97,555,671	$49,760.758
Hail endorsement	$19,249,834	$24,165,248
Loss-to-premium ratio	73.4%	100%

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[1] *Alberta Hail and Crop Insurance Corporation publishes a statutory annual report which provides more detailed information than given in this section.*

Forage Insurance Program[1]

The program was extended to cover all areas of the province in 1988. Unfortunately all of the province, with the exception of the Peace River area, was dry in the spring and early summer, resulting in poor spring pastures and seriously reduced hay growth. Indemnities under this program were extremely heavy.

Following is a summary of business for 1988, with a comparison for 1987:

SUMMARY OF FORAGE INSURANCE PROGRAM

	1988	**1987**
Policyholders	7,645	3,555
Acres insured	993,971	97,218
Animal units insured		400,716
Risk	$105,677,679	$53,501,190
Premium	$17,078,224	$8,874,676
Indemnities	$44,046,246	$25,544,983
Loss-to-premium ratio	260.0%	287.8%

The "all-risk" crop insurance and forage insurance programs were joint programs of the government of Canada and Alberta. All administrative costs for the programs were paid by the province, while premium costs were divided on a 50-50 basis between farmers and the Government of Canada. For the grain crops, the province paid a portion of the farmers' premiums in the higher risk areas.

The hail insurance program does not receive any support from either government.

AGRICULTURAL DEVELOPMENT CORPORATION[2]

The Alberta Agricultural Development Corporation's (ADC) mission as a Government of Alberta agent, responsible for agricultural financial services, was to foster a sustainable, profitable agrifood sector in Alberta by ensuring the availability and advancing the financial services necessary to meet evolving needs.

The corporation offers the following loan programs:

- Agribusiness Loan Program
- Alberta Farm Development Loan Program
- Incentive Programs Offered Under the Specific Guarantee and Alberta Farm Development Loan Programs:
    - i) Range and Soil Improvement Program
    - ii) Sheep Producers' Program
    - iii)Vegetable & Potato Storage Program
- Beginning Farmer Program
- Developing Farmer Program
- Disaster Assistance Loan Program
- Farm Development Guarantee Program
- Specific Guarantee Program

At March 31, 1989, the corporation's loan portfolio consisted of over 25,000 loans and guarantees totalling over $1.1 billion. During 1988-89, almost 750 direct loans for $70 million, and over 6,200 guaranteed loans for $86 million were provided to farmers. ADC also provided direct and guaranteed loans totalling $2 million to agribusiness. The corporation provided about $12 million in incentives, primarily to beginning farmers.

ALBERTA GRAIN COMMISSION

The Alberta Grain Commission, formed under section 6 of The Department of Agriculture Act, provided advice and recommendations to the Minister of Agriculture about issues currently affecting the grains and oilseeds industry. The commission focused on the development of policy recommendations that can help farmers maximize net income and encourage industry efficiency.

Transportation and marketing issues represented the core activities of the commission in 1988. Working closely with Alberta farm organizations, the commission searched for solutions to problems in the grain industry. Producer cars continued to command significant attention. A new and improved Western Barley Futures Contract was developed during 1988. Pricing of western grain for the domestic feeding industry and for domestic food and industrial use was an on-going issue.

The commission took a strong stand in favor of a freer trading agreement for the grain industry with the United States. Believing in a fundamentally competitive grain industry, the commission viewed the relaxing of trade restrictions with the United States as a substantial opportunity for Alberta's grain industry.

Crop diversification was a high priority issue at the commission. An in-depth study was completed on the potential of spice crops in Alberta. A toll-free information line was added to aid Alberta's emerging feed pea industry.

The commission administered the Alberta small grain dealer guarantee program and operated a toll-free grain price information line. *The West Coast Traffic Report* and the *Alberta Feed Grain Price Report* continued to be issued weekly.

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[1] *The Forage Insurance Program was formerly called the Livestock Feed Security Program.*

[2] *Agricultural Development Corporation publishes a statutory annual report which provides more detailed information than given in this section.*

FARMERS' ADVOCATE OF ALBERTA[1]

The Office of the Farmers' Advocate continued to provide assistance to the Alberta agricultural community. The office had three primary functions.

First, to investigate and solve problems and to act as a mediator in disputes which involve individual farmers, farm organizations and other segments of the agricultural industry.

Second, to act in an advisory capacity. Based on past experience and on the similarity among complaints, the office was in a position to advise farmers of alternate routes to follow in attempts to settle their outstanding problems and complaints.

Third, to provide information to individual farmers and farm organizations. Information was offered through publications produced by the Farmers' Advocate's office, through individual consultations and through convening public meetings and seminars on timely issues. The information provided by this office enabled farmers to better deal with their problems and provided them with the knowledge to prevent problems from arising.

In addition to these functions, the office administered and participated in three established programs:

Water well restoration or replacement program (WWRRP)

This program provided landowners whose domestic water source may have been damaged or diminished by seismic or deep well drilling activity with the opportunity to receive financial assistance (pending an investigation and hearing) to restore or replace their water source. The Farmers' Advocate administered this program with funding and accounting provided by the Energy Resources Conservation Board.

Livestock predator indemnity program

The Farmers' Advocate's office provided an appeal function for farmers who were dissatisfied with the outcome of their claim applications made through the livestock predator indemnity program.

Rural crime watch range patrol

The Farmers' Advocate along with the RCMP and the Alberta Cattle Commission promoted and assisted the rural crime watch movement in Alberta. The office stocked and made available signs, videotapes, displays and other rural crime watch supplies. A biannual rural crime watch newsletter was initiated by the Farmers' Advocate's office.

The activities that this office engaged in allowed it to keep abreast of problems experienced by the agricultural community, to assist individual farmers in resolving problems, and to provide feedback to the government and its departments to enable reoccurring problems to be addressed on a more comprehensive basis.

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[1] *The Office of the Farmers' Advocate of Alberta publishes a detailed annual report.*

SURFACE RIGHTS BOARD[2]

The Surface Rights Board, a quasi-judicial board established under The Surface Rights Act, granted operators the right to enter on and use the surface of land for mineral recovery operations and for the construction and operation of power transmission lines, pipelines and telephone lines, where the operator had been unable to acquire the necessary right by consent of the owner or occupant of that land. The board held hearings, in those cases where a private agreement could not be reached, to determine the compensation payable by the operator and the person entitled to receive the compensation.

The board held hearings with respect to damage disputes and requests for review of annual compensation under board compensation orders and surface leases. The board issued written decisions to the parties concerned as required by The Administrative Procedures Act in all cases where a hearing was held and a decision required. The board issued orders granting right of entry, terminating right of entry, fixing compensation, amending or varying compensation on reviews and various incidental orders. It continued to assist in the recovery of money owned by an operator to any person under board orders or surface leases.

The Expropriation Act was administered by the board with respect to expropriation of land authorized under or pursuant to section 31 of The Water Resources Act and The Hydro and Electric Energy Act.

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[2] *The Surface Rights Board presents a detailed annual report to the Minister of Agriculture each year.*

IRRIGATION COUNCIL

The legislative authority for the Irrigation Council is The Irrigation Act. The Irrigation Secretariat was responsible to the council and carried out its functions and duties under the council's direction and supervision.

The objectives of the council are to effect a sound irrigation policy for the province and to act as an advisory body on irrigation to the Minister of Agriculture. Duties as outlined in The Irrigation Act include: approval of additions or deletions of land to or from irrigation districts; approval of borrowing and rate by-laws and budgets; and approval of any expenditure for monies received by an irrigation district under an agreement with the Federal or Provincial government or a local authority to finance the rehabilitation of its works.

The council administered cost-sharing agreements with the 13 irrigation districts. Funds totalling $24,800,000 were provided from the Alberta Heritage Savings Trust Fund under the fourth year of a proposed five year rehabilitation program. These funds represented 86 per cent of the aggregate, the remaining 14 per cent being provided by the districts.

The program continued to rehabilitate and modernize irrigation distribution systems in Alberta. The aims of the program were to assure irrigation users an efficient, adequate and reliable water supply, to allow for increases in irrigated acreage as water supplies permit, and to reduce or eliminate canal seepage. Effective water management and conservation of water and soil were prime objectives of the program. Activities undertaken through the rehabilitation program improved producer income and provided opportunities for family farm development in the irrigated areas, thereby benefiting the province's overall agricultural economy.

In addition to its involvement with the rehabilitation program, the council recommended four project proposals for approval by the Agricultural Research Council.

The council approved expenditures of $193,000 under the irrigation rehabilitation and expansion research program. The funds supported research projects on monitoring of solonetzic soils, the results of which provide data to verify or modify the Land Classification Standards; a reservoir management study to improve efficiency of water delivery below a reservoir; the first year of a study on the effectiveness of using triploid grass carp (fish) to control vegetative growth in irrigation canals was supported; funds were provided for a preliminary study on the feasibility of generating hydro power from low head canal structures, and; some monitoring devices were purchased to measure the effectiveness of reclaiming salinized and waterlogged land after rehabilitation.

The council held 15 meetings, including a research meeting and two meetings with the Alberta Water Resources Commission to discuss water supply limits in the South Saskatchewan River Basin. Twelve of the 13 irrigation districts were toured and meetings were held with the boards of directors of the districts to discuss matters of concern.

The council approved the net addition of 7,595 acres to irrigation district assessment rolls. In addition, 53 project reports and addendums submitted under the irrigation rehabilitation cost sharing agreement were approved for a total estimated construction value of $30,747,257.

AGRICULTURAL PRODUCTS MARKETING COUNCIL[1]

The Alberta Agricultural Products Marketing Council was established to act as a supervisory body for marketing boards and commissions.

The council supervised the operations of eight marketing boards and three commissions and advised the marketing boards and commissions under its supervision of their responsibility not only to producers but to other sectors of the industry and the public. The council supervised the following:

- The Alberta Cattle Commission,
- The Alberta Chicken Producers' Marketing Board,
- The Alberta Egg and Fowl Marketing Board,
- The Alberta Hatching Egg Marketing Board,
- The Alberta Pork Producers' Marketing Board,
- The Alberta Potato Commission,
- The Alberta Sheep and Wool Commission,
- The Alberta Sugar Beet Growers' Marketing Board,
- The Alberta Turkey Growers' Marketing Board,
- The Alberta Fresh Vegetable Marketing Board,
- The Alberta Vegetable Growers' Marketing Board.

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[1] *Agricultural Products Marketing Council publishes a statutory annual report which provides more detailed information than given in this section*

ALBERTA DAIRY CONTROL BOARD[1]

The Dairy Board, operating under The Dairy Board Act, met its responsibilities in the administration of fluid milk, industrial milk and cream sectors. These responsibilities included the licensing of dairy producers, processors and distributors of fluid products; setting and adjusting fluid milk quotas; regulating time and payment to producers; and in general governing the sale of milk in Alberta.

The board was responsible for the operation of the Alberta milk market sharing plan, an industrial milk plan entered into by federal and provincial authorities. The board was a member of the Canadian Milk Supply Management Committee, a body responsible for the development of the national dairy policy.

The number of active dairy producers (fluid milk, industrial milk and cream) as of March 31, 1989 totalled 2,051. Total provincial production was down by 0.19 per cent from the previous fiscal year. Total milk production, fluid milk and industrial, increased by 0.34 per cent, and cream production decreased by 16.14 per cent. Fluid milk sales increased by 0.17 per cent from the previous year.

The board operated a fluid milk equalization pool for Alberta fluid milk producers. This plan successfully completed its 14th year of operation and enabled producers to share in the sale of fluid milk returns regardless of location or source of sales.

No additional producers were accepted under the graduated entry program. A total of 1,104 industrial producers have entered the fluid sector since the start of the graduated entry program in 1975.

Producer financial returns for fluid milk varied during the year. Fluid milk prices increased $0.98 per hectolitre in June, August and October, 1988, ending the fiscal year at $51.07 per hectolitre. Industrial milk prices remained unchanged at $40.56 per hectolitre. Churning cream prices also remained unchanged.

Board staff maintained an audit program of all fluid processors to ensure compliance with regulations issued under the authority of The Alberta Dairy Board Act.

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[1] *The Alberta Dairy Control Board publishes a detailed annual report.*

RESEARCH DIVISION

The research division continued to manage research grant programs, evaluate agricultural research programs and projects, disseminate research information and co-ordinate research activities. Among the division's prime responsibilities was administration of the Farming for the Future agricultural research program. Since 1979, Farming for the Future has financially supported more than 1,160 research and demonstration projects. Over this ten year period the program has been allocated a total of $50 million from the Alberta Heritage Savings Trust Fund.

A growing divisional responsibility was to provide administrative services for the Alberta Agricultural Research Institute. The institute is designed to play an important role in Alberta's future agricultural research effort. Its primary objectives were to co-ordinate, promote and support agricultural research. To promote public awareness of agricultural research, the research division issued a number of publications in 1988-89. These included two bulletins that listed the research and on-farm demonstration projects supported by Farming for the Future. During the year, preparation continued on the 1988 *Farming for the Future Progress Report.*

As well, several issues of *Research Report* were published. The newsletter dealt with the recent results of and developments in agricultural research. Its target audiences were producers, extension workers and the public in general.

The division's research co-ordination activities included maintaining direct contacts with numerous provincial and national research agencies and research co-ordinating bodies. The division provided various services to the 16 decision and policy making bodies associated with the Farming for the Future program and the five research committees which support the board of directors of the Alberta Agricultural Research Institute. It also provided administrative services to the Alberta Agricultural Co-ordinating Committee (AACC) and maintained contact with the AACC's 14 advisory committees.

Division staff represented Alberta and the department at a number of levels. For instance, division staff represented the AACC on the national co-ordinating body for agricultural research, and participated in the ongoing national inventory of agricultural research. The division's executive director represented Alberta Agriculture on the Provincial Technology and Research Advisory Committee and the Canadian Agricultural Research Council. This type of interaction ensured effective co-ordination of Alberta Agriculture's research activities, and maximized the exchange of research findings within and between the department and other agencies.

Alberta Agricultural Research Institute[1]

The Alberta Agricultural Research institute (AARI) is a provincial Crown corporation, governed by a board of directors appointed by the Minister of Agriculture. The board consists of farmers, agribusinessmen and representatives of the major agricultural research agencies and relevant departments of the Alberta Government. The board met on several occasions in 1988-89, during which it established the official mandate, priorities and operating guidelines for the institute.

The purposes of the AARI were to promote agricultural research and development through:

- setting agricultural research policies and priorities;
- providing agricultural research co-ordination;
- supporting long-range research programs; and
- facilitating interagency and multidisciplinary research.

To achieve these purposes the AARI:

- co-ordinates, promotes, and supports research in agriculture;
- compiles, assesses and disseminates information on agricultural research and technology;
- funds in whole or in part research professorships; and
- assists in providing research equipment and facilities.

The institute's board of directors implemented two new assistance programs, the research co-ordination program and the matching grants program. Under the matching grants program, the institute matches, on a 50:50 basis, contributions for approved research projects. Proposals are encouraged in five priority research areas: agricultural processing, diversification, marketing, production efficiency and resource conservation. This program is primarily intended to attract co-operation from the private sector. The institute approved 36 such grants worth $832,000.

The research co-ordination program is designed to provide scientists involved in agricultural research with support in order to promote co-ordination and communication among researchers involved in similar work or multidisciplinary research. Four research co-ordination grants worth $16,350 were approved.

Farming for the Future[2]

The Farming for the Future program is financially supported by the Alberta Heritage Savings Trust Fund for the purpose of funding agricultural research which benefits Alberta food producers and processors. The program is administered by the Farming for the Future Council. The research division provided ongoing, general administration of Farming for the Future, in addition to administering individual Farming for the Future projects carried out by Alberta Agriculture and Agriculture Canada research scientists.

Farming for the Future has two principal funding vehicles: the research program and the on-farm demonstration program. The projects that are supported within the parameters of the two programs are chosen on the basis of several criteria, including their ability to help enhance the long-term viability and profitability of Alberta's agricultural industry.

Farming for the Future completed the second year of its third mandate, which runs for five years until March 1992. During the year, Farming for the Future grants totalling $3.9 million were awarded to 100 projects under the research program. Since funding began in 1979, 561 research projects have been awarded a total of $43.5 million.

The specific goal of the on-farm demonstration program is to accelerate the transfer of new technology to producers. Under this program, farmers, department staff, and research scientists work together to demonstrate agricultural innovations in action. The on-farm demonstration program began in 1982. In that interval, 583 projects have been approved awards totalling $2.5 million. In 1988-89 alone, 167 on-farm demonstrations were approved at a total cost of $593,174.

[1] *The Alberta Agricultural Research Institute publishes a statutory annual report, which provides more detailed information on its activities.*

[2] *A detailed and comprehensive report on Farming for the Future activities is provided to the Legislature annually through the Minister of Agriculture.*

PERSONNEL SERVICES DIVISION

The personnel services division administered and developed policies and procedures related to staff and organizational development, occupational health and safety, classification, recruitment and selection, employee relations and compensation and benefits administration.

Advice and guidance was provided to the human resource development committee in developing and implementing a human resource strategy in the department. An organization review of the food processing development centre, was completed, as was a major review of the conservation and development branch of the irrigation and resource conservation division. Staff provided advisory services and co-ordination to ensure that job related learning and development was available for all staff.

Twelve applications for education leave were processed as were 1496 applications for training courses of which 257 were in-service, 839 out-of-service and 400 in-house.

A major effort in the area of occupational health and safety was the implementation of the Workplace Hazardous Materials Information System (WHMIS). This program combined with ongoing worksite evaluations (with the assistance of Personnel Administration Office), legislated audiometric testing and blood sample tests for pesticides, completed our efforts in the area of occupational health and safety.

The personnel administrators provided consultation in all functions of personnel administration to department line managers. Recruitment activity over the year maintained the level of the previous year and was a result of normal resignations, transfers and retirements.

Classification for the management group, except for the executive manager classes was delegated to the department by the Public Service Commissioner. The department became responsible for the classification of approximately 1270 of its permanent complement of 1291.

Wage employment varied from 400 to 800 during this period.

OCCUPATIONAL HEALTH AND SAFETY PROGRAM STATISTICS
April 1, 1988 - March 31, 1989

Employee hours worked	3,305,028
Disabling Injuries	24
Medical Aid Cases	20
Fatalities	0
Frequency Rate*	7.21
Severity Rate**	79.20

**Frequency rate is the number of disabling injuries per million manhours.*

***Severity rate is the number of work days lost due to disabling injuries per million manhours.*

ALBERTA AGRICULTURE INJURY COSTS
Current Costs
(April 1, 1988 - March 31, 1989)

W.C.B. Assessment	$356,894.27
Compensation of Wages (includes Gov't. supplement)	$71,427.82
Medical Costs	$19,471.59
Pension Awards	$0.00

Prior Years Cost

Compensation of Wages	$22,877.34
Medical Costs	$45,515.57
Pensions	$167,073.16
Total Cost	$326,365.48

PERSONNEL SERVICES TRANSACTIONS
April 1, 1988 - March 31, 1989

Commencements	129
Terminations	127
Transfers	65
Reclassifications	128
Updates	109
Position Creations (permanent & temporary)	48

PERMANENT POSITIONS AS OF APRIL 1, 1988

Department Support Services	152
Primary Production	428
Marketing and Processing	100
Field Services	419
Planning and Development	192
Total	1291

FINANCE AND ADMINISTRATION DIVISION

The finance and administration division provided centralized financial services to the department, ensuring consistency and compliance with The Financial Administration Act and related directives of Treasury Board. The division was responsible for the accounting and control of expenditures and revenue, development and review of financial systems and procedures to ensure effective financial management, coordination of the budgetary process, and co-ordination of facilities required for the working environment of departmental staff. It accomplished this through the following branches:

Accounts Branch

The branch controlled the department's financial affairs by administering accounts payable, receivables, revenues and general accounting of the department.

Administration Branch

The branch co-ordinated the acquisition and the provision of departmental administrative facilities and services.

Budget Branch

The branch was responsible for budget co-ordination and control, to ensure all budgeted expenditures reflect departmental programs.

Financial Review

The branch conducted internal financial reviews to ensure that control procedures are implemented in the department.

Financial Systems

The branch developed and implemented all accounting and financial management information systems within the department.

STATEMENT OF REVENUE FOR THE YEAR ENDED MARCH 31, 1989

	1988-89 [a]	1987-88 [b]
PAYMENTS FROM GOVERNMENT OF CANADA:		
Miscellaneous	568,489	230,376
FEES, PERMITS AND LICENSES:		
Brand Inspection	1,571,315	1,502,106
Brand Registration	278,687	258,930
Livestock Water Program	246,329	118,606
Farm Livestock Veterinary Lab	178,122	98,091
Swine Breeding	153,282	183,985
Soil and Feed Testing	131,232	143,004
Dairy Lab Testing	95,378	90,696
Other	492,043	373,012
OTHER REVENUE		
REFUNDS OF EXPENDITURE:		
Previous Year Refunds	4,559,701	12,586,516
Dairy Board Act	331,910	370,490
Other	11,933	12,329
SALE OF ASSETS:	238,707	137,671
MISCELLANEOUS:	289,465	87,339
TOTAL REVENUE	9,146,593	16,193,151

Other revenues received from the Government of Canada, such as Agriculture Processing and Marketing Agreement and Hail and Crop Insurance are not reflected in the above figures, as they are collected and reported by Alberta Treasury.

[a] *Preliminary - not audited*

[b] *Audited figures have been restated where necessary to conform to 1989 presentation.*

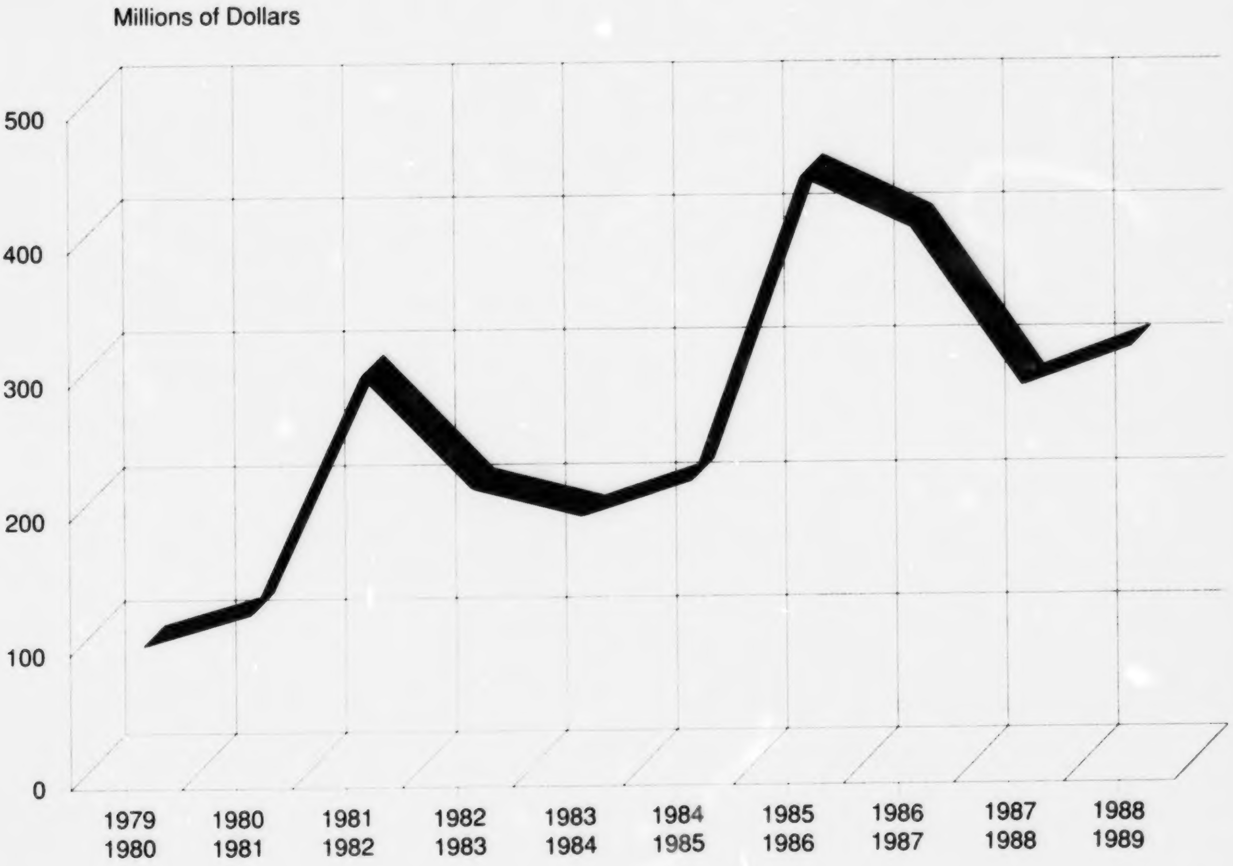
BUDGET ESTIMATES, SPECIAL WARRANTS AND EXPENDITURES CLASSIFIED BY VOTE ($000)

	1988-89 Budget Estimates	1988-89 Special Warrants	Expenditures For The Years Ending March 31	
			1989[a]	1988[b]
VOTE 1 - DEPARTMENTAL SUPPORT SERVICES				
(No Sub-Program Breakdown)				
TOTAL VOTE 1	10,053		9,651	9,926
VOTE 2 - SUPPORT FOR PRIMARY PRODUCTION				
(Sub-Programs)				
Program Suport	1,656		1,613	1,478
Animal Products	77,931	21,350	93,891	98,131
Animal Health	7,958		8,101	8,057
Plant Products	31,317		32,562	31,608
TOTAL VOTE 2	118,862	21,350	136,167	139,274
VOTE 3 - SUPPORT FOR MARKETING AND PROCESSING				
(Sub-Programs)				
Program Support	413		472	379
Marketing Services	22,946	6,900	24,331	17,546
Market Development	3,981		3,888	3,635
TOTAL VOTE 3	27,340	6,900	28,691	21,560
VOTE 4 - FIELD SERVICES				
(Sub-Programs)				
Program Support	248		267	234
Advisory Services	16,079		16,004	15,284
Rural Services	11,959	9,725	21,389	12,409
Farm Financial Management Services	1,146		979	686
TOTAL VOTE 4	29,432	9,725	38,639	28,613
VOTE 5 - PLANNING AND DEVELOPMENT				
(Sub-Program)				
Program Support	922		828	830
Economic Services	3,343		3,212	3,185
Irrigation and Resource Management	8,720		8,529	7,970
Research	3,578		1,898	464
TOTAL VOTE 5	16,563		14,467	12,449
VOTE 6 - AGRICULTURE DEVELOPMENT LENDING ASSISTANCE				
(No Sub-Program Breakdown)				
TOTAL VOTE 6	71,052		71,052	55,807
VOTE 7 - HAIL AND CROP INSURANCE ASSISTANCE				
(No Sub-Program Breakdown				
TOTAL VOTE 7	11,401	3,850	14,382	16,271
TOTAL DEPARTMENT	284,703	41,825	313,049	283,900

[a] *Preliminary - not audited*

[b] *Audited figures have been restated where necessary to conform to 1989 presentation.*

Alberta Agriculture
Expenditures 1979 - 1989



PLANNING AND DEVELOPMENT

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    Farm business management branch 14
    Agricultural law program 15
    Market analysis branch 16
    Statistics branch 16
    Production economics branch 17
Irrigation and resource management division 17
    Conservation and development branch 18
    Irrigation branch 19
    Land evaluation and reclamation branch 20
Systems development division 21
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PLANNING AND DEVELOPMENT

The planning and development sectors is organized to ensure the close co-ordination of economic and planning services which contribute to a viable agricultural community with the planning and development of agriculture's most basic resources: land, soil and water. Ongoing objectives of the sector include:

- to ensure the provision of a complete range of up-to-date applied agricultural economic services that will contribute to a viable agricultural industry.
- to provide co-ordination for applied agricultural economics in the department.
- to effectively meet the needs of the department for strategic planning, program planning, evaluation, policy analysis and policy development.
- to provide effective support services to the department in the area of electronic data processing (EDP) development, maintenance and use.
- to promote management and conservation techniques among farmers, producer groups and local authorities, in order to achieve better use of land and water resources for sustained agricultural production.
- to provide irrigation project planning, land evaluation and resource analysis support to farm organizations, local authorities and provincial agencies to assist them in the planning, allocation and development of Alberta's land and water resources for the long-term benefit of agriculture in the province.
- to support the activities of the province's Irrigation Council in its role of administering The Irrigation Act and the irrigation rehabilitation and expansion program.

PLANNING SECRETARIAT

Grain handling and transportation issues were a priority in 1988-89. The planning secretariat studied a proposed method of directly paying the Crow Benefit to producers. The secretariat prepared reports on payment mechanisms, assessed the effect of the pay the producer proposal, participated in the preliminary development of a joint proposal on a grain producer/grain user method of payment, and met with farm organizations, the federal government and other parties interested in the method of payment issue.

Other Canadian grain policies that received attention included Alberta's position on the effects of grain sector price changes on the Special Canadian Grains Program and a review of the Canadian Wheat Board Quota Review Committee's proposal on supply agreements. The secretariat also participated on a committee reviewing the canola cash call market, assisted in the development of terms of reference for a study on the effect of the Japanese canola oil tariff on Alberta's canola industry and attended hearings on feed freight assistance. After the announcement that oat marketing was to be removed from Canadian Wheat Board jurisdiction, the secretariat worked with governments and the industry to increase domestic and export opportunities for oats and oat products.

The secretariat also monitored events in the Canadian red meat and livestock sectors. A report on transportation was reviewed and comments were prepared for the Red Meat Advisory Committee. The secretariat participated in a study of "no-roll" beef entering Canada from the United States and analyzed the implications to Alberta's industry of recommendations made by the Ontario Beef Marketing Task Force. In addition, a member of the planning secretariat worked on an industry task force that examined the legislative costs to the livestock industry of the Canada-U.S. free trade agreement.

The secretariat worked with other parts of the department and the livestock industry to maintain Alberta's position in the red meat tripartite stabilization program. The federal cap proposals on tripartite stabilization were analyzed and a response was prepared, with a number of issues investigated in preparation for meetings with producers groups.

During the year, the planning secretariat participated in activities in the area of farm income support. It submitted a position paper to the Federal/Provincial Grain Safety Net Committee, and initiated a study to analyze the implications of the Grains 2000 proposal on farm business and tax management and to develop a tax-based income stabilization/equalization plan for farmers. The secretariat, in conjunction with the department's farm income support steering committee, prepared guidelines to be used in assessing farm income support programs. Finally, the secretariat helped to develop a strategy on provincial participation in crop insurance funding and assisted in the evaluation of the proposed multi-stage national sales tax and the formulation of recommendations to the Provincial Treasurer.

Several program evaluations were undertaken by the secretariat. Secretariat personnel advised and assisted the pork industry branch, the farm business management branch, the home economics branch and the dairy production branch in evaluation processes, and joined in an enhancement study of the green certificate program. The secretariat also reviewed Alberta Agriculture's soil and water programs. As well, the secretariat participated with Agriculture Canada in establishing terms of reference to be used in an evaluation of the Canada/Alberta Agreement on Soil, Water and Cropping Research and Technology Transfer (CARTT). The secretariat organized a preliminary review of the mandate and responsibilities of the Alberta Agriculture Co-ordinating Committee.

The secretariat continued in its liaison role between Alberta Agriculture and native agricultural development efforts. In co-operation with the improvement districts, the native services division of Alberta Municipal Affairs and the Federation of Metis Settlements, the secretariat organized a study of the agricultural potential on Metis settlements. A member of the secretariat acted in an advisory capacity to the Alberta Indian Agricultural Development Corporation.

Planning secretariat staff prepared briefings and other documents that addressed a variety of agricultural issues in response to departmental, interdepartmental and ministerial needs. As well, staff continued to act as consultants to farmers, farm organizations and other parts of the department in strategic planning, regional planning, program promotion, evaluation, policy analysis and development.

In concert with the strategic management committee, the secretariat updated Alberta Agriculture's vision document and revised the strategic plan itself. The vision document and the strategic plan serve as the department's framework for making planning and budgeting decisions.

Resource Planning Branch

In April 1988, the land use branch and resource economics section of the production and resource economics branch merged to become the resource planning branch. Concurrently, the resource planning branch was incorporated into the planning secretariat.

The resource planning branch was responsible for long term strategic planning of agricultural land use in Alberta. The branch worked to ensure that agricultural interests are represented within the land and water use planning and policy formulation mechanisms of the provincial and municipal governments. Both public and private land use issues were dealt with. Staff participated in the development of regional and sub-regional integrated resource plans (IRPs). Branch staff were active in the preparation of the southern, central, Peace River and northeast regional IRPs. Branch staff also participated in drafting a wetlands management policy report, developing and implementing the Alberta component of the North American waterfowl management plan and were responsible for developing a report and model bylaw for livestock siting and land use planning. An interdepartmental project was also initiated to identify conflicts and gaps in provincial policies relating to agricultural land use. Several annexation and landfill site referrals were also handled by the branch.

The branch continued to develop a computerized database for strategic planning. An integrated information system including data from census, SIDMAP and the Alberta Hail and Crop Insurance Corporation was developed for use in policy analysis. The database was used to determine and report on the location and extent of lands in Alberta that are potentially marginal for annual crop production and to estimate annual cropping on or in proximity to these lands. The information proved to be very useful in discussions on the development of a federal/provincial soil conservation agreement for Alberta.

The addition of resource economics staff to the branch has fostered the intergration of planning and economic evaluation in addressing agricultural issues.

An assessment of the financial feasibility of private irrigation development in the Red Deer River basin was completed for Alberta Environment. Economic and social effects of irrigation were re-examined in view of the growing demand for water in the irrigation regions and recent trends in weather patterns. An interdepartmental investigation continued to provide improved data for balancing competing demands for water in the present and potential irrigation areas of the province. Work was initiated on longer term projects to assess the economics of alternative agricultural land uses and the economics of resource conservation.

ECONOMIC SERVICES DIVISION

The economic services division provided applied economic services in production economics, commodity market analysis, statistics, farm business management and preventative farm law to farmers, farm organizations and commodity groups, the private sector servicing the agricultural industry and government departments and agencies.

Economic conditions in the agricultural sector increased the demand for economic research and extension education. The division directed extra effort toward the provision of farm financial management training and farm advisory services. Negotiation of a Canada-Alberta farm management memorandum of understanding was completed. The division undertook increased economic research and analysis in support of policy and program development.

Farm Business Management Branch

The goal of the farm business management branch is to continually increase the knowledge and skill base of primary producers in financial and general business management and in this way help to ensure the existence of a viable agriculture community in the province. To effectively reach this goal, branch programs were developed to support department staff, and private individuals and organizations who deal directly with rural Albertans or make policies affecting them. Working with these individuals and groups, the branch was able to reach producers with information and training in farm business management and increase the awareness of basic principles and timely issues.

The branch supported educational programs such as the farm financial management initiatives project. In the final year of this four year project, over 300 farm families participated in 31 Gear Up Financially courses. As well, 180 farm families were provided with in-depth consultations under the counselling portion of this program. The branch developed course material, tools for planning and analysis, and trained and supported instructors and advisors involved in this project.

To ensure that farm managers would continue to have access to these kinds of programs and services, funding and planning were put in place for a Canada-Alberta farm management training and advisory program. Under this new program, farm business units will have access to counselling and advice through the farm financial advisory service and Gear Up Financially. The branch will manage the provincial program as well as develop course materials for the management training component of the program.

The branch also offered field services staff support and training in farm business management. This included a four day workshop in Red Deer, further development of an accounting reference manual and investment and tax update seminars. The computerized version of the farm financial planning package was revised.

The branch was able to continue offering skill training and development in the use of computers in farm management. This year computers on wheels was a joint project of: Lakeland College, Lethbridge Community College, Fairview College, Olds College, Alberta Career Development and Employment and Alberta Agriculture's agricultural engineering branch and the farm business management branch. Over 1,000 participants attended 130 courses offered across the province.

To make some aspects of farm management training more accessible to the public, a home study course on profit was completed in co-operation with the home study section of the agricultural education branch. The University of Alberta and Athabasca Universtiy acted as advisors on this project.

As well as its work with department staff and rural Albertans, the branch also provided individuals in the agriculture lending field with an update on agriculture production and marketing. There were 82 participants in the ninth Agricultural Workshop for Lenders organized in co-operation with Olds College.

The branch also provided information and advice on tax management and policy, estate planning, farm financial management, investment, budgeting, the use of computers in farm management and other timely issues affecting agriculture.

The effect of tax reform and a possible national tax were of particular concern. Branch staff worked closely with senior staff in the department and individuals in the private sector to examine the effect of these changes on primary producers. Staff presented 30 seminars to producers on issues related to tax and estate planning. Information was supplied to the media through news releases, feature articles and interviews. In co-operation with a private accounting firm, the branch produced a revised version of the publication *Tax Management Strategies for Alberta Farmers*. Staff also assisted individual producers with tax and estate planning problems. The annual farm tax update seminars for lawyers and accountants were held in Grande Prairie, Lethbridge and Edmonton with a total attendance of over 400.

In the investment area, videos, pubication, seminars and computer programs were developed. A video on land leasing was produced. Research was also compiled for a publication on land investment. A revision of an existing publication *Know Your Machinery Costs* and the annual update of *The Custom Rates Survey Summary* and *Farm Machinery Costs as a Guide to Custom Rates* provided information on which to base machinery investment decisions. Computer applications were being constructed.

In addition to the budgeting and farm planning material developed for the Gear Up Financially course, a series of articles on this topic were prepared for farm papers. *The Glossary of Farm Business Management Terms* was revised and reprinted. Branch staff participated in the development of a record keeping and analysis package for sheep producers.

The expanding use of computers by producers, the department and the branch placed heavy demands on branch specialists in this area. They provided assistance and advice to department staff and private individuals and continued to distribute Alberta Agriculture public distribution software. This section continued to deliver timely information through the monthly *Compu-Farm* newsletter. The remote bulletin board system (RBBS) continued to receive over 100 calls per month from all areas of Canada, and even the United States and Australia. In co-operation with the broadcast media branch and field services, a videotape about purchasing a computer for the farm was produced for the department's videotape lending library system.

In co-operation with Olds College, the branch co-ordinated the second annual Agricultural Management Systems - Directions and Visions conference held in Edmonton. Over 100 participants from across Canada participated in this forum for issues related to the development of agricultural software.

The effect of new technology on agricultue was also one of the issues discussed at the twelfth annual Managing Agricultural Technology for Profit conference held at the Lodge at Kananaski. Over 350 people attended the conference.

The Rural Education and Development Association co-operated on the production of the *Save All Management Planning Calendar*. The cost of production of 12,000 calendars was again covered by sponsorship from the private sector.

Agricultural Law Program

The agricultural law program provided current information, resource material and counselling for the interpretation and applications of case and statute laws that affect agriculture.

Farmer, commodity group and agribusiness queries and problems were used to identify current issues. Relevant legal issues were researched and recommendations to the agricultural public regarding preventive action rather than remedial treatment was undertaken.

There was a decrease in the number of enquiries relating to mortgages, foreclosures and bankruptcy.

The law program was delivered throughout 89 seminars held across the province, magazine columns, media interviews given to newspapers, and approximately 1,000 individual consultations.

Market Analysis Branch

The market analysis branch provided farmers and other members of the agricultural sector with timely and pertinent market-related information on which to base production and marketing decisions that increases their long-term profitability.

The branch monitored and analyzed agricultural commodity and product markets, to prepare market situation and outlook reports, to interpret policy and other developments related to agricultural markets, to offer marketing extension courses and to provide market news and information. Branch staff were actively involved in the analysis and development of a variety of programs and issues such as tripartite stabilization, method of payment, Crow Benefit offset, Canada-U.S. free trade agreement, multilateral trade negotiations and countervail duty trade issues.

Comprehensive reports on market prospects for the major farm commodities produced in the province were made available directly to over 4,000 farmers and others including the media. Continued emphasis was placed on distributing market analysis and outlook reports through commodity association newsletters such as the *Canola Digest*, *The Western Barley Grower*, *The Alberta Cattlemen*, *Forage Seed Notes*, *NuKrop News* and through the media. Specific situation and outlook reports were prepared upon the request of both in-house and outside clients.

The branch worked closely with field services staff and farm organizations in extending programs to provide farmers with a more thorough understanding of the function of the market, and information on innovative marketing techniques. The provincial grain and livestock outlook conference Accent '89 was held at Edmonton in February.

The branch also disseminated market news and short-term analysis through *The Weekly Livestock Market Review* and *The Weekly Market Grains and Oilseeds Review*. About 1,800 farmers and industry people were on this paid subscription mailing list at the end of the year. *The Weekly* was also published through a variety of electronic data systems. *The Weekly Livestock and Grain Market Chart Book* was provided to all paid subscribers to *The Weekly*. RNEWS, a departmental system for the electronic distribution of market information on a daily basis was maintained. The monthly *Livestock Slaughter Summary* was published to supplement the regular market news publications of the branch. A computerized agricultural market database, AGDATA, was maintained to facilitate internal research activities and for public use. The branch worked closely with the Alberta Cattle Commission (ACC) on its program for the collection and dissemination of cattle market news including the development of the new CAM (Complete Answering Machine), microcomputer-based remoting managing system for market news reporting. It is anticipated that this will replace conventional In-Watts lines and result in cost savings to both the ACC and the department.

Statistics Branch

The statistics branch provided Alberta's farmers, agricultural industry, farm organizations, agribusiness and government with agricultural statistical information services.

Staff members maintained liaison with the Agriculture Division of Statistics Canada, Agriculture Canada, farm and business organizations and other government departments. The branch completed several surveys but only when other sources were non-existent or inadequate.

The *Annual Statistics Yearbook* which contained a summary of agricultural data for the previous years was released in July. This document was supplemented throughout the year by releases on current agricultural statistics.

Each quarter, an update on *Farm Cash Receipts and Expenses for Alberta Farmers* was prepared and released. The report provided text and data on the Alberta farm income situation and outlook for the following year.

A regular crop report was released every two weeks from May to October with a year-end summary published in December. A quarterly forage report supplemented the crop report.

An annual survey of beekeepers was conducted, to estimate the number of beekeepers, number of colonies, average yield and total production of honey in Alberta. Branch staff also conducted a survey of vegetable and potato producers to obtain acreage and production data. In addition, a sheep survey which obtained information on production and marketing intentions of Alberta sheep producers was undertaken.

A two-page factsheet presenting major provincial agricultural statistics was issued.

The branch continued its involvement in price collection and reporting by releasing reports on weekly average retail food prices for Edmonton and Calgary; weekly producer, wholesale and retail food prices; and monthly average farm input prices in Alberta.

The branch continued to improve available data and information on agricultural imports coming into Alberta and agricultural exports leaving the province. Extensive reports were prepared and released.

Branch staff conducted a speciality crop survey to obtain additional information on acreage and yields of speciality crops in Alberta.

Custom rate data and information were obtained from many producers across the province. Reports containing the data summaries were released.

Branch staff conducted and released a report of cattle feeding in the province.

Production Economics Branch

The branch provided information to field staff and farm clients aimed at improving economic farming efficiency and reducing production costs. Research information was also compiled and presented in support of provincial and federal programs.

Staff were involved in supporting the department's effort in the national tripartite support programs for crops. Field crop surveys were targeted to specific soil types and agro-climatic areas, and irrigated grain corn was added to the sampling plan. Overall, 260 producers participated in the 1988 crops survey. Reports summarizing production returns and costs for dryland and irrigated crops were distributed to field staff. In addition, budgets for 22 crops were mailed out to field staff. A report was published on the economics of production and marketing of greenhouse crops.

The branch made input to red meat tripartite stabilization for beef, hogs and sheep. Twenty-five commercial and farm feedlots were surveyed. A computer model was being developed to analyze the feedlot data.

Sixty hog, 40 sheep and 90 cow-calf farms were surveyed for the 1988-89 production year. At the same time, the 1987 survey results were analyzed and distributed to study participants and field staff. Quarterly hog returns and costs and an annual hog report were also distributed. Net hog returns for the first quarter of 1989 indicated further deterioration of hog feeding margins. This decline, which commenced in the second quarter of 1988, was due to falling prices and rising feed costs.

Fluid milk production costs were monitored on a monthly basis, and monthly reports were submitted to the Public Utilities Board.

The 1988 annual dairy cost study indicated a six per cent increase in production costs from 1987. However, producer prices kept pace with the cost increases so that net returns remained relatively unchanged.

A report was published on the economics of table egg production for the production year 1987.

At the request of the Alberta Cattle Commission, the branch undertook a study of the growth and development of the cattle industry in Alberta.

The branch provided information on transportation costs, policy developments and freight rate charges for a wide variety of agricultural commodities transported by rail, truck and air. Published reports included a quarterly newsletter *Agriculture Transportation*, and a booklet, *Statutory Grain Freight Rates from Alberta to Vancouver/Prince Rupert and Thunder Bay for the 1988-89 Crop Year*.

The branch continued a salinity research project. Thirty-nine producers provided data for the 1988 crop year. The 1987 research results were reviewed with study participants.

Up to date information on agricultural real estate transactions and land values was provided through quarterly real estate reports.

Branch staff were involved in several committees. Several applications from immigrant entrepreneurs were analyzed for Alberta Manpower. Staff reviewed research reports and applications for Farming for the Future research grants, made technical presentations, provided consultative services and answered numerous requests for information. Staff were also called as expert witnesses in legal proceedings.

IRRIGATION AND RESOURCE MANAGEMENT DIVISION

The mandate of the irrigation and resource management division was to promote the responsible management of Alberta's soil and water resources, and to encourage appropriate soil and water management infrastructure development. Activity was focused on assisting producers and water managers in implementing sound soil and water conservation and development practices.

With the widespread drought experienced during the summer of 1988, soil erosion by wind was much more extensive than observed for many years, affecting some two million acres. The need to encourage producers to adopt improved land management practices became more apparent.

The dry conditions also increased the recognition of the need to manage irrigation and on-farm surface water supplies more effectively and interest in surface water management and irrigation development increased. The most significant activities of the division were:

- development of a proposal for a Canada-Alberta soil conservation initiative,
- initiation of the Alberta private irrigation development assistance program,
- refinement of the farmland development and reclamation program guidelines,
- review of the irrigation and expansion program mandate,
- input to the development of irrigation expansion guidelines and irrigation risk and instream flow criteria,
- review of climate change and weather modification issues,
- application of a uniform irrigation land classification standard.

Conservation and Development Branch

The conservation and development branch continued to develop, promote and extend soil conservation and farm water management technology to farmers, rural municipalities and other agencies. It promoted awareness through the news media and by means of manuals and brochures. It continued to plan, co-ordinate, and provide input into soil conservation surveys, into soil and water degradation control studies and into technology transfer events.

A strong emphasis was placed on developing and implementing new soil conservation initiatives in Alberta. A major effort was concentrated on establishing an enriched, broadly based, soil conservation program in co-operation with Agriculture Canada in response to the national agricultural strategy. Program details and agreements were drafted with preliminary plans in place for implementation of the Canada/Alberta soil conservation initiative in 1989-90.

The Canada/Alberta Agreement on Soil, Water and Cropping Research and Technology Transfer (CARTT) was brought into full operation in 1988-89, the second year of the program's six-year mandate. Administrative support and contracted services were provided to component 'A' of the agreement and to the integrated and co-ordinated federal basic research initiative. Program staff were recruited, area committees with farmers and producer group representatives were established and a total of 53 projects were implemented and funded. These projects were carried out province-wide and included seven projects relating to program operations, 26 demonstration projects, 17 awareness and technology transfer projects and three major applied research projects. Press releases were prepared and released and the *CARTT newsletter* was initiated.

A thorough review and evaluation of dryland soil and water conservation and development programs of Alberta Agriculture was initiated.

The branch supplied the agricultural community and government planners with climate and weather interpretation information. The farm weather line, a joint project with Environment Canada in Grande Prairie, Edmonton, Calgary and Lethbridge, provided agricultural weather forecasts to over 102,160 callers, an increase of 34 per cent over 1987-88. The branch's weekly publication, *Alberta Agricultural Weather Summary* was circulated to 350 individuals and agencies. A weather forecasting and terminology factsheet was prepared in co-operation with Environment Canada. Preparation of the report *A Comparative Summary of Weather Modification Activities in Alberta* was jointly funded with the Alberta Research Council. An interdepartmental study on the potential effect of climate change was initiated and an interim report entitled *Towards a Strategy for Adapting to Climate Change in Alberta* was completed.

An ongoing soil moisture monitoring program was conducted. A fall soil moisture map alerted farmers and field staff to impending drought conditions. Satellite imagery was evaluated as an additional aid in identifying drought affected areas.

The report of the conservation tillage survey was completed and distributed to departmental staff and interested groups. Development of a series of eight soil and water conservation manuals continued. A fourth manual on water erosion was completed and manuals on conservation tillage and on-farm water management were initiated.

The branch continued to assist agricultural service boards in delivering resource conservation projects throughout the province. A total of 65 applications for assistance under the farmland development and reclamation program (FDRP) were received, with 87 technical approvals completed. The guidelines for FDRP were modified to emphasize the development of on-farm demonstrations of water retention and storage. In addition, 100 soil conservation area program (SCAP) applications pertaining to wind and water erosion, and dryland salinity control were received and 119 technical approvals completed. Technical assistance was provided in the form of topographical surveys and engineering designs.

Technical assistance in evaluating 40 applications for silting and erosion damage caused by extensive flooding in the Slave Lake area was provided to the disaster assistance program of Alberta Public Safety Services.

The dryland salinity investigation service (DSIS) continued to work in close co-operation with PFRA, the Dryland Salinity Control Association (DSCA), and agricultural service boards. Forty-one DSIS reports were completed. Many of the recommended controls, particularly the planting of forages, were implemented by landowners.

The dugout testing program expanded from 195 in 1987-88 to 675 in 1988-89. The program supported the Alberta water supplies assistance program.

Staff were involved in more than 30 research, development and demonstration projects throughout the province. Project topics included soil salinity control, soil moisture conservation, wind erosion control, peat soil development, alternatives to summerfallow, reduced tillage, legume plowdown, crop water use, irrigation water quality and soil moisture measurements.

The on-farm water management study continued to be supported by the branch. The results of this interdepartmental study will be used to improve on-farm water management practices and reduce the downstream and wildlife habitat effects of drainage.

Branch staff assisted in the planning and organizing of the 44th annual meeting of the International Soil and Water Conservation Society held in Edmonton.

Irrigation Branch

Irrigation branch programs focused on developing and promoting the adoption of on-farm and project irrigation and drainage management and development technology.

The abnormally dry spring conditions and continued warm dry weather, which led to late season water rationing and depleted reservoirs, caused the 1988 irrigation season to be particularly active.

The Alberta private irrigation development assistance program was announced in December 1988 to assist Alberta producers install the capital works required to bring water to private irrigation projects. Private sector engineering design support will be encouraged by the program. By March 31, 1989, eight applications were submitted under the program.

Technical support was provided on several interdisciplinary working groups and committees including: irrigation capital works standards, instream flow, risk analysis, irrigation district management modelling, Western Irrigation District 2000 and Beyond study, and Blood Indian irrigation development.

AgLIS phase III implementation was completed with installation and setup of microcomputer workstations in the Vauxhall, Lethbridge, Strathmore and Bow Island district offices, as well as five microcomputer workstations in the Lethbridge irrigation and resource management division offices.

Support was provided to the 13 irrigation districts and Irrigation Council by the provision of technical assistance, applied research, evaluation, construction monitoring, and feasibility planning for irrigation rehabilitation and expansion projects. Detailed planning studies were prepared for six existing irrigation projects and five preliminary irrigation feasibility studies for expansion blocks within and outside irrigation districts. Special projects studies for three irrigation district internal reservoirs were completed. Technical review was provided on 32 irrigation capital works engineering reports for the Irrigation Council. Construction monitoring was carried out on 48 ICW projects. Evaluations were commenced on irrigation spillways and on the condition of buried membrane liners which are directly covered with gravel armour.

Applied research and evaluation studies included: buried plastic pipe deflection, grass seeding of canal banks, prototype self-cleaning trash screen, farm delivery metering, concrete cracking and displacement, leaky turnout gates and irrigated crops root development. The on-farm irrigation pump testing program has been phased into a more comprehensive irrigation system evaluation program. Some 64 systems tests were completed with half of them done for farmers participating in the irrigation management program of the branch.

The five year "Elimination of aquatic weeds in irrigation canals using triploid grass carp" study completed its first year. Results to date suggest that there may be a biological control mechanism available to replace the application of chemicals to the water for weed control in canals.

Flow monitoring in nine blocks was performed in co-operation with St. Mary River Irrigation District, Lethbridge Northern Irrigation District, Taber Irrigation District and Union Irrigation District.

Technology transfer and training programs included ditchrider level I and level II courses, and a technical conference for irrigation district managers and engineers. The quarterly *Water Hauler's Bulletin*, now in its eighth year, was published and distributed to some 500 subscribers. An article *From the Farm Perspective* has become a regular feature of all issues.

Staff continued to participate in several on-farm extension functions involving crop production seminars, presentations on irrigation management to various water user meetings, field demonstrations and presentations to producer conferences.

In response to the province wide concern with moisture deficits, more effort was put into media releases and news articles to disseminate information on irrigation development and management.

On-farm irrigation development saw an increase in activity during the past year as producers upgraded existing systems and new land was brought into irrigation production. Moratoria on expansions due to water allocation and conveyance limitation restricted development in some irrigation districts and for private developments in the Oldman River and Milk River basins. Interest in small scale irrigation in central and northern regions of the province increased. The Peace River saskatoon and small fruit industry increased the demand for technical services in that region.

The Alberta irrigation management (AIM) program continued to be in demand. The emphasis was on training irrigators to be responsible managers of their irrigated land and water resources.

IRRIGATION BRANCH 1988-89 COMPARATIVE ON-FARM STATISTICS

	82-83	83-84	84-85	85-86	86-87	87-88	88-89
Acres of land levelled	3,262	3,513	1,992	2,021	3,950	3,200	2,677
Sprinkler system investigations	560	640	721	911	1,008	1,070	1,226
Water license feasability reports	99	142	133	187	225	190	89
Irrig. management participants	213	181	158	170	171	137	128
Subsurface drainage investigations	32	161	103	175	276	338	144

Land Evaluation and Reclamation Branch

The land evaluation and reclamation branch continued to focus on the following major program areas: salinity identification, control and reclamation; irrigability land classification; surface and subsurface water quality monitoring; canal seepage control; groundwater flow evaluation and irrigation impact assessments.

Demand by farmers and irrigation districts for classification of land for irrigation remained steady. A total of 490 level II requests were completed during the year, covering 42,196 acres of land. Private consultants were used extensively to help complete these requests. Fee for service land classification generated a total of $57,798 in revenue for 1988-89, compared with $9,660 the previous year. The backlog of requests carried over from previous years was eliminated.

As of November 1988, all land being proposed for irrigation development was being evaluated using the Alberta land classification standards. Seventy-one private irrigation development land classification requests were completed under the new procedure.

The land evaluation and reclamation branch laboratory processed 20,000 soil samples and approximately 1,000 water samples of which 90 per cent were contracted out to private labs. The branch continued to assist other branches with sample preparation and quality control of analyses carried out by private laboratories.

Land classification services continued to be provided in planning irrigation development on the Blood Indian reserve. Branch staff co-ordinated land irrigability classification on a 17,770 acre block of land along the proposed Mokowan Ridge canal on the reserve. A land irrigability classification map was prepared for 39,840 acres in the Barons-Carmangay area as part of the evaluation of the creation of an irrigation district in that area. A preliminary review of the irrigability of two million acres of land was completed as part of the special areas water supply study.

Preparation of an irrigation suitability synopsis map for all lands which have been classified in southern Alberta continued. The preparation of colored saline/wetland maps for each of the 13 irrigation districts continued.

A total of 14 applied research projects were carried out, including: irrigability of solonetzic soils; salt movement in saline/sodic soils; soil reclamation after canal rehabilitation; comparison of drainage methods of canal seepage control; irrigation impact on water quality; and salinity control using drainage and vegetative cropping. Several of these studies were carried out in co-operation with private consulting firms and universities across Canada.

Direct assistance to the irrigation districts and farmers continued to be an important activity for the branch. Design of a 750 acre subsurface drainage project was completed by the branch as a pilot project for the Lethbridge Northern Irrigation District (LNID). Monitoring of a 1986 subsurface drainage installation within the St. Mary River Irrigation District was completed.

A total of six groundwater and salinity investigations were carried out. In addition, a groundwater impact assessment was initiated adjacent to the LNID main canal for a wildlife habitat project of Alberta Forestry, Lands and Wildlife. Approximately 40 irrigation rehabilitation reports were reviewed by branch staff for the Irrigation Council.

The branch completed the first phase of a major groundwater and irrigation impact study in the Milk River Basin in conjunction with Alberta Environment. Water quality monitoring continued in the Etzikom Coulee and Verdigris Coulee projects. In addition, monitoring of representative subsurface drainage systems is continuing to evaluate potential impacts of drainage effluent on surface water quality.

The branch assisted other government agencies, irrigation districts and the private sector by providing aerial photo mapping information related to irrigation development. Field operations included drilling, sampling and logging about 1,700 shallow and deep testholes.

The branch co-ordinated the maintenance of a complete microfiche file of all pipelines in Alberta. The information is provided to Alberta Agriculture branches involved in drilling and excavating activities. In addition, staff processed gas and oil well, pipeline, utility line and gravel pit applications from Alberta Forestry, Lands and Wildlife to ensure related activity and installations will have minimal conflict with irrigated agriculture development.

The branch managed the Lethbridge Wind Research Test site, which tests and demonstrates solar and wind pumping systems for agricultural water supply.

Approximately 20 technical reports and papers were completed and five technical papers were submitted for publication in scientific journals.

Continued emphasis was placed on the development and use of private consultants and contractors for work in land classification, soil drilling investigations and laboratory analysis.

SYSTEMS DEVELOPMENT DIVISION

Production and Operations Branch

The production and operations branch provided computerized systems support to the department.

A new automated information processing plan was produced.

Quality assurance for computerized systems was provided by an automated information processing (AIP) standards committee. An AIP policies, standards and procedure manual was completed.

User Support Branch

The user support branch provided services to department staff, ranging from technology evaluation through to consultation on acquistions and training. Computer applications were developed in data management, statistical analysis and mapping.

A plan to replace outdated word processing and communication equipment was implemented. The replacement equipment will be phased in.

The branch continued to develop standards and guidelines for the use of computer technology within the department.

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PRODUCTION

The production sectors' primary goal is to promote the sound development of the crops and livestock sectors of Alberta's agricultural industry, consistent with the wise stewardship and management of our land and water resources. As part of its ongoing responsibilities, the sector undertook research, developed and transferred production technology, provided diagnostic and problem solving services and promoted efficient and environmentally sound management practices to assist Alberta farm families and processors to maximize their financial returns. Comprehensive laboratory services related to animal and plant diseases, and feed and soil analysis were also maintained.

The sector is made up of three divisions – animal health, animal industry and plant industry – and a central program support unit. Sector objectives were met by:

- undertaking key areas of basic and applied research in relation to improved plant and animal production
- developmental promotion of contemporary crop production and management practices and diversification of Alberta's crop base
- transfer of technical information to producers and agri-business involved in the production and marketing of meat, poultry and dairy products
- reducing the effect of crop and livestock diseases through diagnosis, prevention and control services as well as contribute to the protection of animal and human health and well-being
- administration of Alberta Crow benefit offset program and livestock drought assistance programs, and
- maintaining a central program support unit responsible for administration and delivery of various programs:
  - – Alberta farm credit stabilization program
  - – national tripartite stabilization programs for beef, hogs, lambs, sugar beets and dry edible beans.
  - – Alberta farm fertilizer price protection plan
  - – special assistance to beekeepers.

PLANT INDUSTRY DIVISION[1]

The plant industry division of Alberta Agriculture was comprised of five branches. The crop protection and soils branches were located in Edmonton, the Alberta Tree Nursery and Horticulture Centre in north east Edmonton, field crops in Lacombe and the Alberta Special Crops and Horticultural Research Centre in Brooks.

The division maintained a strong developmental role in fostering and encouraging contemporary agricultural practices, identification and investigation of new research and technology, diversification of the crop base in Alberta and a consultative role with industry and producers.

Crop Protection Branch

The crop protection branch continued efforts to enhance farm income and increase security of crop production by reducing losses caused by pests.

The branch was responsible for prevention and control of losses caused by weeds, insects, plant diseases and problem wildlife. In addition, the branch administered the apiculture program of the department.

Major regulatory activities were the administration of The Weed Control Act, The Agricultural Pests Act and The Bee Act. Extension education, preparation and packaging of technological information for delivery to farmers and staff training were major activities, and the branch again prepared several books, factsheets and press releases for publication.

Preventing major pests from establishing in Alberta continued to be one of the important branch responsibilities. Alberta was kept free of the Norway rat, diffuse and spotted knapweed, Dutch elm disease, nodding thistle, varroa mite. Other pests were kept at low levels, including rabies, bacterial ring rot, and virulent blackleg of canola. In 1989, efforts to completely eradicate bacterial ring rot began.

A major effort to stem the advance of virulent blackleg of canola was initiated. Virulent blackleg has spread westward from initial infestations in Saskatchewan, near Lloydminster. A government sponsored seed testing program ensured clean, disease-free seed was available for the spring of 1989. Alberta continued steady progress towards becoming free of both diffuse and spotted knapweed. Alberta has reduced the infestations to scattered patches.

The Russian wheat aphid, a serious pest of most cereal crops, was identified in Alberta in the summer of 1988. The aphid has moved steadily northward across the United States and its appearance here was anticipated. Alberta farmers were advised of control techniques.

A leafy spurge control program using sheep as biocontrol agents was successfully completed in the M.D. of Cardston. An introduced insect that controls leafy spurge has built up in population in the Cardston area.

Research continued at four locations with field plots across most of the province and included tests of control measures on various pests in a variety of crops with emphasis on developing techniques and products for improved crop management practices as well as for new crops. Measures included testing of pesticides, biological agents, and extensive surveys for weeds and insects. The weed control survey progressed well and is scheduled for completion in 1989.

Insect pests, weed problems, plant diseases and rabies were at normal levels. Livestock predation increased due to high coyote populations.

Honey production was maintained despite low prices and fewer colonies of bees. The size of the industry was reduced when importation of bees was prohibited by federal order. This action was taken to prevent the accidental importation of the bee parasite, varroa mite. Since much of the Alberta bee industry relied on the annual importation of nucleus colonies, the import prohibition was a major blow.

A survey conducted on Alberta's bee population confirmed that tracheal mite, a serious internal parasite of bees, has reached the province. On a more positive note, a survey for the more serious varroa mite did not find any of these pests in Alberta.

The branch co-ordinated a major paper outlining issues and needs related to pesticides and participated in lengthy debates on the issue.

Soils Branch

Applied research, diagnostic and analytical services and technology transfer were provided by branch staff directly to farmers. Crop production information was provided on inputs such as fertilizer and lime and on improving production on solonetzic, acid luvisolic and organic soils.

Field and laboratory research was conducted to refine recommendations on the use of fertilizer, lime, gypsum, crop growth regulators, fungicides and tillage. The development of crop production systems that are economically and environmentally sound for Alberta soil and climatic conditions was the goal of this work. Research was begun using a point injector applicator capable of placing fertilizer directly into standing cereal crops, perennial forages and into the crop residue of zero-tillage. Field work was conducted to determine the extent of copper deficiency in soils, which causes stem melanosis. Fertilizer use for the year ending June 30, 1988 increased to 886,834 tonnes from a total of 835,856 tonnes in the previous year.

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[1] *The Plant Industry Division publishes a detailed annual report.*

The agricultural lime freight assistance program (ALFA) was revised, effective April 1, 1988, to encourage the development and use of local supplies of marl as a liming material and to bring maximum freight rates under the program in line with current rates. An incentive of three dollars ($3.00) per cubic metre of marl was provided in addition to the transportation assistance. Grants under the program increased to $128,058 this year from $110,017 in the previous year. Thirty one applicants received assistance for transporting 5,216 tonnes of lime or marl compared to 4,624 tonnes in the previous year.

The agricultural soils and animal nutrition laboratory provided analytical services to department specialists to diagnose or research crop and animal production problems. Technical assistance was also provided to private sector agencies.

The farm fertilizer price protection plan continued to pay grants to farmers to reduce the cost of crop production inputs. Payments were based on $50 per tonne of nitrogen (N) and $25 per tonne of phosphate (P_2O_5). The program was extended to July 31, 1989. The administration of the program was transferred to central program support on October 1 1988.

A summary report of four years of progress of the Alberta – Heilongjing range improvement and development project was presented at a project evaluation meeting in Harbin, China. The project was part of the department's technical exchange program to foster expanded trade opportunities.

Alberta Special Crops and Horticultural Research Center

The Alberta Special Crops and Horticultural Research Center (ASCHRC) was involved in province-wide extension research and developmental activities relating to all areas of horticulture and special crops. The centre's activities were primarily related to agricultural business unit development and its two associated goals of long term profitability of primary producers and food processors.

Test sites for the research, extension function of ASCHRC staff were located throughout the province. In addition to using the three farms at Brooks, research plots were located at Bow Island, Edmonton and Standard.

Production of herbs, spices and essential oil crops received priority in the special crops program. Monarda has been identified as an essential oil crop that has potential for production in Alberta. Other crops such as coriander, caraway and mints were further evaluated.

Investigation of grass seed production potential under irrigated conditions in southern Alberta, was initiated. Management practices, disease control and economics of production were being investigated.

The centre's soil and water program continued its work with salinity monitoring. A computerized system for quick measurement of salinity levels was developed. Water-use studies were initiated for safflowers and lentils.

Research on commercial greenhouse industry pest control using biological control for the western flower thrip continued. A native predator, the minute pirate bug, captured from alfalfa fields, was evaluated and found to be effective.

Carrot leathers were developed by the food processing and quality evaluation program. This potential snack food made from cull carrots and a fruit product was judged flavorful and nutritious.

Plant disease problems in commercial atriums continued to be of concern. Imported diseases on tropical plants caused particular concern to plant pathologists, because the diseases were usually unfamiliar.

The centre's nursery crops program directed new efforts at hardiness screening for new plant material and at container production.

The sweet potato whitefly was a new pest found in commercial greenhouses, affecting poinsettia production. Greenhouse cucumbers and tomatoes continued to be major vegetable crops. Sales of greenhouse cucumbers were made to markets as distant as Los Angeles and Montreal.

Day-neutral strawberries, imported from California, became a major factor in Alberta's small fruit industry. ASCHRC continued to study production management techniques and tested the varieties for quality.

The centre hosted 2,000 visitors at the annual field day, in addition to which a number of commodity oriented field days were held. The centre also hosted a one-day tour by the board of directors of the Alberta Agriculture Research Institute.

Alberta Tree Nursery and Horticulture Centre

At the Alberta Tree Nursery and Horticulture Centre existing research programs in nursery, vegetable, seed potato, greenhouse and tissue culturing were strengthened and new programs were implemented. Production and extension programs were maintained.

The nursery production section distributed 674,138 shelterbelt trees. This was a 70 per cent reduction from the previous year, due primarily to the implementation of a charge for these trees. An application fee of $25 plus a per plant charge of 12 to 56 cents, dependent upon plant, was implemented in 1988. An additional 41,850 Colorado spruce and 3,150 lodgepole pine were distributed to grade one students for Arbor Day.

The greenhouse section provided extension and research programs for the nursery production program and the Alberta Fruit Growers Association. Tissue culturing of saskatoons was maintained at 8,000 plants. One thousand plants of a Polish sour cherry tree were produced for winter hardiness trials in Alberta. This section also tested and evaluated growth enhancing products.

An extension program for agribusiness and consumers was maintained. Demand for this service continued to be high. The horticulture information officer received 5,915 telephone inquiries, 4,077 people used the hortline (a pre-recorded horticultural message) and 61,030 publications were distributed.

The vegetable program assisted the vegetable industry by providing research and extension programs for producers in central and northern Alberta and support for Sun-fresh Farms Co-op.

The seed potato program was transferred to ATN&HC in 1988. This program provided 66,125 nuclear and pre-elite seed tubers to producers. Grower extension and research programs continued to receive a high priority.

Special emphasis was placed on developing more self-sufficiency in the seed potato industry by encouraging growers to produce their own nuclear and pre-elite seed, rather than relying on government sources. Four growers moved towards producing their own nuclear and pre-elite seed potatoes.

Export sales of seed potatoes to U.S. markets continued to increase. The ATN&HC was committed to developing more grower self-sufficiency in nuclear and pre-elite seed potato production to ensure the highest quality seed for domestic and exports markets.

A new micropropagation pathology program began at the ATN&HC. This unit was responsible for providing disease testing and research support for the seed potato and tissue culturing programs.

Field Crops Branch

There was great demand for specialists to attend meetings with information to offset the drought and lower returns by looking at new technology and options available.

The 77 municipal seed cleaning plants processed 30.4 million bushels of cereals and oilseeds in 1988 for an average of 394,620 bushels/plant. This represents approximately 75 per cent of the seed required in Alberta for cereals and oilseeds. A new plant was established at Pincher Creek and a replacement of the plant at Willingdon for a grant total of $650,000. New plants cost approximately $1.2 million. During 1988, provincial grant assistance was reduced from 40 per cent to 30 per cent. Grants totalling $364,021 were issued to cost-share upgrading of 34 seed plants.

Interest increased in the use of annual forages to extend the grazing season. Research was conducted on intercropping winter and spring cereals to provide late fall and early spring pasture.

The ten forage associations received $310,195 in 1988 and continued to provide an excellent focus on the forage industry.

Alberta had approximately 20 per cent of the pedigreed seed acreage in Canada. Alberta had 230,232 acres with 1,068 seed growers in 1988. Assistance was provided to promote the use of high quality certified seed.

Special crops occupied approximately 410,000 acres, an increase of 10,000 acres over 1987. Peas, lentils, dry beans, and faba beans were the principal crops.

The research section continued to operate winter nurseries in Oregon and California for double cropping.

A new two-row hulless feed barley named Condor was released. Feeding trials at the University of Alberta indicated that the amount of soybean meal in hog rations may be reduced by 11 per cent when Condor hulless barley is used.

The field crops branch assisted Alberta Public Works in designing new growth facilities for the research farm.

Emphasis was placed on improving drought resistance in Alberta's cereal germplasm and incorporating the semi-dwarf gene into the two-row feed barley germplasm.

The research farm placed $26,839 into general revenue from breeder seed and by-product sales and received $10,856 in royalties during 1988. The branch worked closely with Olds College to establish a seed and grain program for certificate and diploma status.

ANIMAL INDUSTRY DIVISION[1]

In 1988-89, the animal industry division was comprised of seven branches. The beef cattle and sheep, pork industry, poultry, and regulatory services branches were headquartered in Edmonton; the dairy processing and dairy production branches in Wetaskiwin and the horse industry and feeder association branch in Calgary.

In addition, this division was also responsible for the administration of the Alberta Crow benefit offset program and the Canada-Alberta livestock drought and greenfeed assistance program. The Alberta Crow benefit offset program's objective was to offset the distortion in feed grain prices in Alberta created in Alberta by the payment of the federal Crow benefit to the railways. The Canada-Alberta drought assistance program's objective was to prevent the sell-off of livestock breeding stock because of the shortage of forage supplies due to severe drought conditions in a large part of the province.

The activities of the division consisted of the transfer of technical information to producers and agri-business involved in the production and marketing of meat, poultry and dairy products. A number of acts and regulations pertaining to livestock and dairy production were administered by the division. This involved making amendments as necessary to meet changes in the industry.

The division also supplied support and technical resource to the national tripartite stabilization programs for red meat.

Beef Cattle and Sheep Branch

The beef cattle and sheep branch continued to extend technology and to provide production, marketing and financial information to the public with the objective of increasing the long-term net income generating capacity of producers and agribusiness. The branch also participated in research and demonstration projects to solve a variety of problems limiting animal production.

The branch was involved in the development of safety net programs for livestock producers. In particular, the branch committed considerable resources to further refine and develop the national tripartite red meat stabilization programs for beef and sheep. Staff were consulted in a review of the yield model used for the forage insurance program.

With drought a major problem on the prairies again, branch staff were involved with drought monitoring, the development of two federal-provincial programs to assist livestock producers that had been affected by the drought, and acted as secretary/co-ordinator to the livestock drought assistance program appeal board.

The branch continued its activities in animal reproduction, breeding, nutrition and management. It also continued with record of performance (ROP) programs for beef and sheep, the private bull test stations, the sheep test station, the warble control program, the livestock predator and beeyard compensation programs, and the research and development program.

Branch staff participated in extension meetings, farm visits, media presentation, field days and responded directly to many other requests for service. These activities represented the major individual time commitment by branch staff. The major single project completed during the year was a revision of the *Beef Cow-calf Manual*. A further 2,000 copies of the *Beef Herd Management Reference Binder* and study guide were sold. Work began on the development of computer software to support the beef herd management program.

The branch and the regional livestock specialists were involved in more than 51 research and demonstration projects during the year. In addition, staff provided statistical analyses and experimental design assistance to 19 projects outside of the branch. There is a complete listing of these projects in the animal industry division annual report.

The branch was responsible for the administration of The Artificial Insemination of Domestic Animals Act. During 1988, four semen producing businesses, 33 inseminating businesses, 83 artificial inseminating technicians and 16 semen producing technicians were licensed. Work continued on the development of revised regulations under this act.

The semen evaluation laboratory handled 806 samples of semen from various species.

The department participated in the federal-provincial ROP program. The records from 104 beef herds with 6,938 weaning records were processed on the new system for 1988. Sixty-three flocks of purebred sheep with 6,681 lambs were enrolled in the ROP home test program.

The branch provided municipalities with technicians under the beef ROP weight supervision program. Under this program, over 28,000 head of cattle on 491 farms in 16 districts were weighed at a cost to the department of just less than $31,000.

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[1] *The Animal Industry Division publishes a detailed annual report.*

Private bull test stations received assistance from department staff, ranging from weight supervision to general publicity and the calculation and distribution of results.

At the Alberta sheep ROP test station, 37 breeders entered a record 221 rams in the 56-day growth test conducted at the Olds College campus. An additional five rams were entered in the wool breeds test. The performance test under irrigated pasture conditions at the Hays pasture in southern Alberta was discontinued as research reviews have shown lambs tested on forage and grain rations perform similarly to those tested under pasture conditions. The first ever central performance test of angora goats in Canada was conducted in 1988, with 25 yearling bucks entered by producers.

The department shared 60 per cent of the warble control program's cost with local governments; the latter were responsible for monitoring local sources of infestation and enforcing the regulations. One and two-tenths per cent of beef carcasses at co-operating packing plants were found to be infected with warble grubs in the February to May period compared to one and one-half per cent in 1987, five per cent in 1983, 14 per cent in 1980 and 44 per cent in 1968.

There was a change of emphasis in programs to provide protection of livestock in the Athabasca area from black flies. Without a permit to use methoxychlor in the Athabasca River to reduce black fly numbers, increased emphasis was placed on methods of protecting animals from adult black fly attacks. A program was initiated to provide producers in the major black fly affected areas with one-third of the costs to purchase an on-farm system for protecting livestock from the adult biting flies. Research was supported for testing other methods to provide on-farm protection from adult flies. A planned test of a biological insecticide, BTH 14, as a larvicide for black flies in streams was deferred because stream flows were low and black fly larvae numbers were insufficient to evaluate the product.

Agricultural service boards received grants totalling $23,648 to cover 60 per cent of the costs of programs they undertook to promote improved livestock production practices in their districts.

The nutrition section of the branch provided nutrition and feeding management information, diagnosed the causes of nutrition-related problems and recommended improvements to feeding programs to producers, veterinarians and the feed industry. The section also provided support services to department staff.

The ration advisory service and feed testing program provided feeding and management information directly to producers and agribusiness. A total of 12,064 feed and plant samples were analysed at the agricultural soils and animal nutrition laboratory. Of this total, 18 per cent were regular producer samples, 27.5 per cent were diagnostic (demonstration) samples and 54.5 per cent were research samples.

During 1988-89, 1,056 regular and 854 demonstration feed analysis reports were printed and evaluated by laboratory nutritionists. Requests for detailed ration recommendations for samples submitted to the agricultural soils and animal nutrition laboratory totalled 284, compared with 103 in the previous year.

The livestock predator indemnity program paid compensation totalling $223,803 to producers for loss of domestic livestock resulting from predator attacks in the 1988 calendar year. The beeyard program paid compensation of $2,594 to bee producers for bear attacks in the 1988 calendar year.

Dairy Processing Branch

Dairy processing specialists inspected each dairy manufacturing plant regularly, collected samples for laboratory analysis and submitted the results to the branch, the respective plants and health officials. Unsatisfactory reports were followed up by special inspections and detailed discussions with plant personnel. These activities ensured that wholesome, high quality products were available to Alberta consumers.

Annual plant inspections were conducted jointly by provincial and federal inspectors. Alberta's provincial rating remained the highest in Canada. The branch represented provincial and federal interests in the four western provinces on a national committee that reviews and, where necessary, revises the dairy plant inspection guidelines used throughout Canada.

ALBERTA DAIRY PLANT RATINGS

	1987	1988
National average plant score	82.2	80.2
Alberta average plant score	84.3	83.3
Lowest scoring plant in Alberta	72.7	75.8
Highest scoring plant in Alberta	98.6	98.4

The voluntary certification of dairy plant employees in Alberta continued with several home study courses being available.

Bulk milk grader training and surveillance was maintained. The bulk milk grader manual was updated.

Dairy manufacturing plant licenses issued in 1988 totalled 43. One dairy manufacturing plant ceased operation during the year. The inspection program for milk pasteurization units continued. All units were reinspected during the year.

A pasteurizer operator training program was developed using the

Pasteurizer Operator Manual as the reference and study guide.

Several attempts were made to market imitation cheese in the province. Most food distributors discontinued handling the products when they were made aware of the prohibition on the possession or sale of such products. Others have continued despite warnings and their own commitment to cease. The matter was under thorough review with and by the Attorney General's Department.

Two new dairy products were approved by the dairy processing branch and introduced by Alberta dairy companies – 1 % milk and dairy cordials. A new brand name was added by one company for fluid milk products. A specialty ice cream characterized by multi-colored animal faces moulded into the two litre carton was introduced and marketed as 'SI-ice cream'.

Interest increased in the production and processing/ manufacturing of goat milk and goat milk products.

Dairy Production Branch

The dairy production branch's responsibilities included dairy farm inspection, milk quality assurance and support for or co-ordination of extension activities, advisory services and research pertaining to the dairy industry. Milk recording for purposes of improving dairy herd management on Alberta dairy farms was supported through a grant to Alberta Dairy Herd Improvement Services (ADHIS).

ADHIS became responsible for all data processing and control functions as of April 1, 1988.

During the year, the Alberta dairy producers who had been enrolled on the federal record of performance ROP program were converted to the Alberta dairy herd improvement computer program. This conversion brought all milk recording participants in Alberta under one program.

The dairy production branch, in addition to providing Alberta Agriculture's grant to ADHIS, is responsible for computer costs and co-ordination of extension services related to the use of dairy herd improvement DHI program data by Alberta producers. There were a total of 889 milk recording participants in Alberta as of December 31, 1988. Of that total, 18,637 cows in 263 herds were enrolled on the supervised program at a cost of $20.00/cow/year. Of this number, 135 herds had been converted from the federal ROP program during the year. A total of 626 herds with 40,181 cows received owner-sampler services from ADHIS at a cost of $5.80/cow/year. Monthly somatic cell counting for individual cows was provided to 741 producers at a cost of $2.00/cow/year.

Average yearly production per cow on milk recording was 7,195 kg of milk, 253 kg of milk fat and 230 kg of protein. These levels of production convert to the following BCA's – 155 milk, 146 milk fat and 156 protein. The average cow had a 13 month calving interval and contributed to the herd for 2.6 lactations.

Dairy production branch and field services regional staff co-operated in providing a number of dairy programs and seminars across the province. Over 350 people attended a mastitis control series at four locations in Alberta.

The *Alberta Dairy Producer*, a monthly newsletter, continued to be a valuable source of information on production, marketing and research. A film entitled *A Year In The Life* was produced. The film covers dairy reproduction basics such as nutrition and heat detection. Other dairy films produced by Alberta Agriculture continued to be popular.

Dairy branch staff helped to develop the program for the second annual Alberta Dairy Congress. Approximately 1,500 people attended the two day event.

The annual dairy seminar was renamed the Western Canadian Dairy Seminar. The new Dairy Industry Act and Regulation came into force June 1, 1988. An important aspects of the new legislation was the requirement that all producers meet a single quality and premises standard as of August 1, 1988. The few remaining producers who had not met the higher standards earlier on a voluntary basis either completed the upgrading or ceased operations before August 1, 1988. As of December 31, 1988, there were 1,464 milk producers, down from 1,502 a year earlier, which was consistent with recent trends in producer numbers.

Dairy farm inspections totalled 3,281 during the year and an additional 1,832 advisory farm calls were conducted by inspection staff. Raw milk samples analyzed at the food laboratory for quality totalled 36,407. Only 3.3 per cent exceeded the bacteriological quality standard of 75,000/ml for raw milk. Changes in legislation resulted in a regulatory standard being set for somatic cells in milk of 750,000.

Under the milk grade and price program, a high somatic cell count was included as an infraction criteria. As a result, the number of infractions under the program increased to 288 of which 118 were due to high somatic cell counts.

The number of producers meeting the criteria of the award of excellence increased to 216 from 125 a year earlier.

A milking equipment evaluation unit was developed to evaluate various milking equipment components and improve test procedures.

Milking equipment analysis, consultations on new installations and problem solving resulted in 200 farm calls by the two milking management specialists during the year. Dairy producers were charged a $50 fee /call for 79 of these service calls.

An outbreak of *Nocardia* spp. mastitis affected 118 cows on 45 Alberta dairy farms during 1988. Prior to this, Alberta had only one confirmed case in 1985. Other regions of Canada experienced a similar phenomenon. Most cows were culled soon after they became infected. An investigation was undertaken by branch staff and as a result of this investigation, producers were advised to take certain precautions in their management practices.

Concern was expressed at both producer and processor levels of the dairy industry about the possible impact of using bovine somatotropin. The negative reaction to its use in research dairy herds resulted in milk from cows under bovine somatotropin test being eliminated from the market.

Horse Industry and Feeder Associations Branch

The horse industry branch provided educational services and programs for the benefit of the 20,000 horse owners in Alberta. In addition, the branch administered the feeder associations program, which provides farmers with an alternate means of financing cattle for growing and finishing purposes.

The educational services of the branch were provided through district offices as well as colleges, breed associations and local clubs.

The branch worked with an industry committee to plan and co-ordinate the annual Alberta Horse Breeders and Owners Conference. Over 200 people registered for the 1989 conference.

A special emphasis in educational programs was placed on improved quality by individual breeders. Within the province, a shortage existed for above average quality horses, whereas large surpluses of average and below average quality horses were present.

The horse meat industry returned about $30 million to the province.

The horse improvement program allowed breeders to have an in-depth evaluation of their young stock.

The production of horses to supply sport and recreation markets was a significant agricultural activity in Alberta. Horse industry staff worked closely with marketing staff. Assistance was available for marketing activities such as advertising, participating in trade fairs, printing brochures and conducting educational programs.

The branch co-ordinated displays and demonstrations of 20 Alberta breed organizations during the Spruce Meadows Masters. This project generated considerable public interest and sales opportunity for breeders.

Other horse industry activities included administration of drug testing at major shows, support of research at the Western College of Veterinary Medicine and stallion fertility testing in conjunction with Olds College.

The provincial supervisor of feeder associations oversaw the lending activities of 55 local feeder associations throughout the province in accordance with the Feeder Associations Guarantee Regulation. The levels of loan guarantees increased to $158 million. Approximately 262,000 cattle were purchased at a value of $162 million. Staff conducted inspections of 19 associations. A detailed procedures manual was written and distributed.

Special seminars were conducted for supervisors and secretary-treasurers of local associations.

During the year, new policies were introduced to control the use of the program for breeding animals.

Pork Industry Branch

The pork industry branch provided information and programs for swine producers, agriculture processors and swine industry organizations. Recommendations were made on production technology, marketing, financial management, record keeping and use of analysis and planning tools. Branch services included a comprehensive computerized genetic improvement program with a sow productivity monitoring option, swine semen sales with training in the use of swine artificial insemination, a swine production home study course and a handbook on pork production.

Information and programs were co-ordinated and provided by branch staff, four regional swine specialists and other professional and technical staff. The *Pork Production Handbook* was distributed, on a fee for service basis for the first time this year to 700 subscribers compared to about 1,800 when the service was free in the previous year. This service provided more than 75 fact sheets on pork production topics to a subscriber list.

The 14th annual Alberta Pork Congress was held in June in Red Deer, featuring a livestock show, educational seminars and an industrial trade show. Over 3,000 persons attended the 20th annual Banff pork seminar, held in January. Branch staff and swine specialists helped plan this event.

The Alberta swine improvement program continued its role to help producers of swine seed stock to identify and rank their potential breeding animals by providing information on growth rate, lean meat production and selection indexes to the producer as well as the public. The program was considerably enhanced by conversion to an EBV (estimated breeding value) based system that measures the genetic value of stock and allows comparisons between stock from different farms for the first time. Portable microcomputers for on-farm data collection and analysis were introduced. The federal role in the home test aspect of this program was transferred to the pork industry branch through a federal-provincial agreement.

The Alberta swine artificial insemination program, operated from the Alberta swine breeding centre at Leduc, produced and sold 9,511 doses of swine semen to 332 customers. This unit continued to do research on better methods of semen production. The unit co-operated with the Lacombe research station to help study the genetic aspects of stress susceptibility in swine, and to research a technique that will identify animals carrying a gene related to this problem. A program to follow-up breeding problems identified by the centre's breeding record system was initiated.

Regional swine specialists located at Lethbridge, Red Deer, Vermilion and Barrhead were the key sources of specialized information on pork production for the department. They helped distribute information on branch programs, other swine programs such as tripartite stabilization, and provided technical information and business management advice to swine producers. More than 50 courses and seminars were conducted with the help of regional swine specialists.

Specialists used computer models to aid producers in planning and decision making, conducted numerous farm calls, one-on-one office visits and telephone consultations in the course of their work with producers as well as with agri-business representatives. Research activities included on-farm demonstration projects of recommended technology such as the use of wet nursers. A manual record system produced by the pork industry branch was distributed to over 600 producers. Specialists also worked with producers to help establish a computerized swine record system.

Poultry Branch

The poultry branch provided a number of programs and services designed to increase profitability of the poultry industry in Alberta. In addition, the branch administered regulations relative to the industry under The Livestock and Livestock Products Act. Extension programs and direct primary producer contacts aimed at increasing the level of expertise in the poultry industry in the areas of production and marketing were carried out by the branch's regional specialists. Branch staff continued to work with all sectors of the industry including a wide range of producers representing large commercial farms and small farm flocks to acreage holders with only a few birds. An increased emphasis was placed on extension activities aimed at communicating with agri-business personnel as a means of transferring new technological information regarding poultry production to primary producers.

The branch continued to monitor disease levels and to make recommendations about the improvement of sanitation and management practices in the poultry industry through the provision of a number of poultry health programs aimed at both hatcheries and primary producers. These programs were designed to improve productivity by reducing the number and kinds of disease producing organisms in poultry, especially salmonella, because of its public health significance. The poultry branch also actively assisted the industry in developing specialized programs aimed at improving poultry health.

The branch continued to register and approve chicken and turkey breeder flocks under the Hatchery Supply Flock Approval Regulation. There were 128 chicken breeder flocks and four turkey breeder flocks approved during 1988.

The department through the poultry branch provided financial assistance for poultry research at the University of Alberta. Staff served on the poultry research committee. As part of a five-year agreement, the poultry branch provided a grant of $185,000 for applied research to be conducted at the University of Alberta poultry unit. Branch staff were also involved in a number of on-farm demonstrations and research projects related to poultry production conducted under the auspices of the Farming for the Future program.

The branch continued to develop and monitor cost of production models for shell eggs, broiler chickens, turkeys and broiler breeders. These models were updated on a continual basis to respond to requests for information in the financial area of poultry production.

Under The Livestock and Livestock Products Act, the branch was responsible for the licensing and bonding of hatcheries, and poultry and egg processors. There were 176 licenses issued to establishments operating in Alberta in 1988. The branch was also responsible for the administration of the regulations under the Act ensuring grade standards for poultry and egg products sold to Alberta consumers.

The branch was also responsible for rabbit extension with 134 information packages being sent to interested persons. There were approximately 11,279 rabbits, mostly fryers, processed in Alberta in 1988.

Branch staff played major roles in the planning and conducting of the poultry industry conference and poultry serviceman's workshop, both of which were well attended by industry personnel and producers. Staff also organized and participated in various seminars and courses for persons involved in the poultry industry, as well as attending numerous industry meetings including the annual meetings of the Egg Marketing Board, Chicken Marketing Board, Turkey Marketing Board and Hatching Egg Marketing Board.

RECORDING OF BRANDS SUMMARY

	Cattle	Horses	Sheep	Total
New brands issued	1,399	247	0	1,646
Transfers	685	76	0	761
Certified extracts	0	0	0	0
Cancelled brands	619	98	0	717
Brands renewed	9,661	1,344	1	11,006
Brands reissued	119	20	0	139
Brands in good standing at December 31, 1988	46,392	7,799	10	54,201

Regulatory Services Branch

The main role of the regulatory services branch was the administration of certain Acts and their respective regulations. The Acts and regulations were designed to provide protection service to livestock producers in the following areas:

- brand registration
- brand inspection service
- licensing and bonding of livestock dealers and agents
- licensing of stockyards and stockyard operators
- protection of lands and agricultural products from livestock running at large
- investigations of fraudulent trade practices concerning livestock.

With the co-operation of other government sectors and industry organizations, the branch maintained an effective and efficient protection service for the livestock producers of this province against stolen or strayed livestock.

Under The Stray Animals Act, 846 head of livestock were impounded during the year. Seven hundred and twenty-four head were returned to their rightful owners after the costs of capture, transportation and maintenance were paid. The balance, 122 head, were sold by public auction.

A total of 53 livestock auction markets and 61 livestock assembly stations were in operation at year end.

There were 938 livestock dealers and agents licensed during 1988 compared with 961 in 1987.

The number of head of cattle and horses inspected through markets and for export was 3,366,220 an increase of 192,655 head from 1987.

Five branding demonstrations were conducted.

Alberta Crow Benefit Offset Program

Payments under the Alberta crow benefit offset program were $13.00 per tonne of feed grain fed in Alberta. The payment partially offset the Crow benefit payment to the railways and the consequent distortion of the price of feed grain used in Alberta. The distortion was estimated for this year at $18.00 per tonne.

In January, 1989, the procedure for annual renewal of certificate registration was revised. Registrants who receive benefit through the use of certificates are now required to report the types and number of livestock on hand at the end of the calendar year and sold during the calendar year.

Feed Grain Users
A total of 26,672 feed users were registered on the program as at March 31, 1989. This was a net increase of 517 from the previous year.

Feed Grain Merchants
Eleven merchants registered on the program during the 1988-89 fiscal year. This brought the total to 291 merchants registered on the program from its inception to March 31, 1989.

Under the provisions of condition 9.8.4 of the program, 14 merchants have obtained approval to cash the certificates which they issue when buying feed grain. To date, they have cashed $5,301,306.82 on behalf of the Alberta crow benefit offset program.

Grant Payments
Grant payments from April 1, 1988 to March 31, 1989 totalled $44,604,673.41 plus accrued liabilities. The total payout of grant funds was $47,185,737.

Total grant payments were down from the previous fiscal year's payments of $71,242,192. Total grant payments from September 1, 1985 to March 31, 1989 were $219,665,528.49 (excluding accrued liabilities to March 31, 1989).

During the 1988-89 fiscal year, a majority of registrants (75%) received $1,000 or less, and a total of 13,046 registrants received no benefit.

The dollar value of certificate option payments was down 25 per cent from last year. Farm fed payments were down 42 per cent. These decreases were due to the inclusion of some $21 per tonne payments in the last year's figures, a decrease in claims because there was no claim deadline this year, and a small overall decrease in program participation due to the lower dollar value compared to the Alberta feed grain market adjustment program.

A total of 15,425 claims were processed during 1988-89.

Canada-Alberta Livestock Drought Assistance Program

In 1988, due to below normal snow cover during the winter and below normal spring precipitation, a major portion of Manitoba, Saskatchewan and Alberta experienced variable drought conditions. Perennial forages were the most seriously affected, creating the possibility of a sell off of breeding stock because of the shortage of forage supplies.

To facilitate a uniform program of assistance across Western Canada, a Federal/Provincial Co-ordinating Committee with representatives from Ottawa and the four western provinces was organized. Through this committee, a Federal/Provincial Drought Assistance Program was developed to provide up to $63 million to drought-stricken farmers. This program was offered in two parts:

Greenfeed Incentive Program

- Fifteen dollars per acre for annual forage planted between June 21 and July 31, 1988 and grazed or harvested for hay silage or pasture.
- Four thousand eight hundred applications covering 550,000 acres were received and total payments of $8 million were made of which Alberta's share was $4 million.

Livestock Assistance Program

- A maximum of $60 per head on breeding herds, based on two payments, two-thirds on the July 1, 1988 inventory and one-third on the April 1, 1989 inventory;
- Boundaries were not specified because all payments were based on 1988 forage insurance program data.
- Thirteen thousand seven hundred and fifty applications were received for the initial payments covering 1.2 million head of breeding livestock.
- As of March 31, 1989, $25.4 million was paid on these applications, Alberta's share being $12.7 million.

ANIMAL HEALTH DIVISION

The animal health division provides services to livestock producers and agricultural and food processors in order to reduce the effect of diseases and to increase their long-term profitability. In addition to programs in four branches related to the diagnosis, prevention and control of diseases in animals, the division was involved with the protection of animal and human health and well-being.

Food animal production was supported by the identification of diseases, the reduction of loss and wastage through inappropriate management and through research support. This was accomplished by providing a complete range of modern and up-to-date laboratory diagnostic services, on-farm disease investigations, provision of livestock health programs, consultations on disease prevention, the maintenance and operation of six veterinary clinics in northern Alberta and the transfer of information on diseases of animals. In addition, a grant was given to the Veterinary Infectious Disease Organization, Saskatoon, Saskatchewan, to support research in veterinary medicine.

Protection of animal and human health was achieved by the operation of programs for the inspection of livestock and meat and meat products, programs to prevent the spread of designated diseases and livestock medicine outlet inspections. A grant was provided to the Alberta Society for the Prevention of Cruelty to Animals to assist with the employment of special constables to investigate complaints of cruelty, distress or neglect of animals. Legislation assigned to the division included The Livestock Diseases Act, The Meat Inspection Act, The Fur Farms Act, The Veterinary Profession Act and The Animal Protection Act.

The summer veterinary work experience program provided employment for 21 Alberta veterinary students in 1988 on a cost-shared basis. Students were provided with valuable experience and insight into the operation of a veterinary practice. Funds expended on the program were $40,000. The program was well received by both students and employers. There was a strong indication of its importance and the desire for its continuation.

Reference Laboratories Branch

Specialized laboratory services for the diagnosis of diseases of animals, for research in animal diseases and for disease surveillance were the major responsibilities of the branch. Laboratory personnel provided detection and analytical services in the specialized disciplines of bacteriology, virology-serology, toxicology and electron microscopy-histology to identify a wide range of disease-causing organisms, toxins and nutritional deficiencies causing production losses. These services were provided to Alberta livestock producers and their veterinarians, other institutions and to the rural and urban public. Branch veterinarians and staff also provided specialized consultation and field investigation services to help minimize the inefficiencies caused by animal diseases and ensure the viability of production units.

The veterinary toxicology lab used analytic chemistry to: detect toxins; analyze tissues for minerals, vitamins, enzymes and environmental contaminants; and conduct chemical analyses of farm water supplies. Vitamin A and E nutritional deficiencies were of primary concern to producers and veterinarians this past year. A co-operative project with the University of Alberta was carried out to assess the influence of selenium and vitamin E on disease resistance in feedlot cattle. Feed additives continued to be a leading cause of poisoning in farm livestock and an important source of residues in foods. Analyses for several common feed additives were added to the laboratory capability, which now total 26. Monensin was the most significant contaminant and toxicant encountered in the past year. Lead was the most common cause of poisoning in cattle followed by consumption of seed treated with insecticides.

The bacteriology staff provided extensive services for the detection of disease-causing organisms in Alberta livestock. Milk samples for mastitis diagnosis from dairy producers were submitted the most frequently for testing and specimens almost doubled in 1989 compared to the same period in 1988. *Staphylococcus aureus* was responsible for 24 per cent of the submissions. There was a significant increase in herd surveys to detect mastitis to prevent production losses and penalties. An epidemic of mastitis due to an uncommon organism, *Nocardia* spp., occurred across Alberta on 54 farms by the end of 1988-89. *Salmonella typhimurium* was the most common cause of salmonellosis in cattle found on 22 cattle premises and on three poultry premises. Differentiating these organisms by phagetyping (courtesty of the Laboratory Centre for Disease Control, Ottawa) revealed six epidemic types in Alberta livestock. *Salmonella enteritides*, of international concern in the poultry industry, was found on only two Alberta broiler chicken operations.

The virology-serology lab experienced an upsurge in bovine virus diarrhea (BVD) diagnoses, particularly in reproductive failures and abortions. The reason for the increased number of isolations was likely due to improved laboratory techniques and may not have represented increased levels of disease. Potomac horse fever was recognized for the first time in Alberta. The serology lab was attempting to set up a test to identify exposed horses. Porcine influenza virus was isolated for the first time in 1988-89. The serology lab collaborated with the department of fish and wildlife to process and ship over 1,400 elk blood samples to New Zealand for parentage testing to ensure the purity of Alberta stocks.

The histology-electron microscopy section was involved in numerous projects. One project was to determine the significance of viruses found in calves with scours throughout the province. New computerized image measuring instrumentation was employed in several projects which greatly increased the accuracy of tissue measurements. A new virus detection technique for bovine pneumoniae was implemented in histology for routine diagnostic use.

Two major initiatives significantly affected the branch. One was implementation of Dangerous Goods Shipping Regulations requiring development of a province-wide infrastructure in all animal health division labs. The second was the Workplace Hazardous Materials Information Systems (WHMIS) regulations that will require considerable inputs due to the extensive chemical and reagent inventory held by the branch.

Health Management Branch

The major responsibilities of the branch were the prevention and control of disease in livestock herds, the administration of legislated animal health programs, safeguarding human health by control of designated diseases and enforcement of the regulations for the sale of livestock medicines. Methods of enhancing the viability of animal production by means of improved performance and disease prevention were emphasized to both livestock producers and veterinarians. Veterinarians in private practice were employed to conduct auction market inspections and to monitor the health of herds enrolled on the swine herd health program.

Broad surveillance of disease occurrence in food producing animals was maintained by monitoring diagnostic laboratory reports in addition to deriving information from various field programs and branch activities. Although the number of cases of salmonellosis due to *Salmonella dublin* declined considerably, the number of diagnoses of salmonellosis remained high. The majority of these were in young calves hauled long distances from auction markets outside Alberta. In two cases, children were hospitalized after exposure to infected cattle. A dramatic increase in the number of flocks quarantined for sheep footrot was primarily due to an outbreak on a community pasture in northern Alberta during the grazing season.

Extension activities continued to be an important activity of the branch. The *Animal Health Division Newsletter* was published monthly and was an excellent means of informing veterinary practitioners and department livestock specialists of current disease concerns. Presentations to both producers and professional groups were given by branch veterinarians on a number of occasions and several articles were written for trade journals. Several new factsheets were prepared and others were revised and updated. Assistance was provided by the dairy veterinarian for the production of a film on dairy reproduction.

In-depth investigations of disease problems were carried out on 37 farms by members of the branch. While most of these were at the request of the practicing veterinarian, two were initiated by the branch following a diagnosis of salmonellosis, and one was conducted as a follow-up to a sour gas well blow-out. Dairy or beef cattle were the species most frequently involved, and only two were related to swine and one to goats.

Enrolment in the swine herd health program declined dramatically.

Agriculture Canada organized two meetings to discuss the formation of a national swine herd health policy. The swine veterinarian represented Western Canada on the steering committee. A survey of practising veterinarians in Alberta indicated that they were anxious to increase their knowledge of swine medicine and production methods, and one continuing education seminar was held.

All public livestock sales in Alberta were inspected by veterinary practitioners appointed by the department. The number of animals inspected increased again this year, although the rejection rate remained at similar levels to previous years. Cattle accounted for approximately 80 per cent of the livestock inspected, and swine represented most of the remainder. Small numbers of sheep, horses and goats were also inspected.

Inspection of licensed livestock medicine outlets was shared by members of the branch, and a number of violations were found, primarily failure to remove outdated product. Revisions to the livestock medicine regulations were approved by Cabinet in February.

The veterinary practices operating out of the provincially owned veterinary clinics in Edson, High Prairie and Fairview remained strong and viable, whereas those at Valleyview, Manning and Fort Vermilion continued to require additional financial support to maintain the veterinarian.

Amendments to The Animal Protection Act were passed by the Legislature. Proclamation has been withheld until such time as accompanying regulations are also approved. A substantial increase occurred in the number of fur farm licences issued.

A project commenced last year to determine the survivability of baby calves sold through auction markets showed that calves hauled a long distance and particularly from B.C. were four times more likely to die than calves from the local area. One-third of calves necropsied had died of starvation and more than ten per cent had died from *Salmonella* infections. A higher mortality was also observed in calves offered for sale by livestock dealers than by individual farmers.

A feedlot study involving two feedlots in the Calgary area was carried out by the Airdrie field veterinarian in conjunction with the practising veterinarian to determine the prevalence of *Haemophilus somnus* infection in feedlot cattle. This bacterial infection produces a variety of problems including pneumonia and nervous involvement. All deaths were necropsied and all were cultured except for those cases in which some other cause of death was apparent. This study confirmed the belief that this organism is of major significance as it was recovered from approximately 50 per cent of suspect cases.

The branch also facilitated a study conducted by the Western College of Veterinary Medicine, Saskatoon to determine the efficacy of a commercial bovine respiratory syncytial virus vaccine. The vaccine reduced the occurrence of pneumonia in calves sent to a bull test station but not in calves sent to a large feedlot or kept on the home ranch.

Meat Hygiene Branch

The meat hygiene branch was responsible for the delivery of the meat inspection services to licenced abattoirs and some secondary processors, and the investigation of alleged violations under the authority of The Meat Inspection Act and Regulations. The Act is intended to ensure a safe and wholesome meat supply for the citizens of Alberta and to foster expansion of the meat processing industry in rural areas of the province. During 1988 the branch employed 40 inspectors on a full-time basis, while 19 inspectors and 148 veterinarians were employed on a part-time basis.

Inspection was provided to 76 red meat plants and 91 poultry plants. Livestock inspections during the year were as follows, with the percentage change indicated in brackets:

LIVESTOCK INSPECTIONS

cattle	35,034	(-2.9%)
hogs	135,240	(+22.4%)
sheep	7,835	(+39.2%)
goats	1,189	(+22.7%)
buffalo	79	(+27.4%)
rabbits	11,430	(+48.8%)
broilers	2,796,401	(+15%)
fowl	253,395	(+18.6%)
turkeys ducks, geese & pheasants	119,328	(+3.2%)

An estimated 45 per cent of the cattle and 10 per cent of the hogs were custom slaughtered. The increase in hog slaughter in 1988-89 appeared to be attributable to the temporary labor difficulties at one of the major packing plants. Carcass condemnations for the year remained relatively stable from previous years and indicated that there has been little change in disease levels in the province.

Inspection was also provided to two secondary processing plants at their request. Secondary processors are those meat businesses which buy inspected product and manufacture it into sausage or other specialty products for wholesale distribution. These businesses required an inspection legend on their product in order to penetrate some of the institutional and large retail markets. Inspection was provided on a full-time basis at first and the inspection level was reduced over time as the confidence level in the operator increased and, at the same time, sanitation improved. This system closely paralleled the FOIL system used by Agriculture Canada for their secondary processors. Considerable time was spent developing regulations in consultation with Environmental Health and local health authorities. In the meantime, these two processors have enjoyed a marked increase in business and a number of others are preparing to apply to come under the program.

Enforcement activities continued during the year with approximately 80 complaints received, and 20 were investigated further. Most of the complaints were resolved by negotiation or issuing a warning concerning violations. At the end of the year, five investigations were still ongoing including one second offence for the sale of uninspected product. One individual was convicted for the second time of operating an abattoir without a licence, one individual was convicted of selling uninspected turkeys and one licenced abattoir was convicted of carrying out slaughter without inspection.

Reciprocal tours were arranged with Saskatchewan and federal authorities to examine the standards of construction and inspection employed in each province. This was the first step towards entering into discussion with neighboring provinces with the goal of developing interprovincial trade of provincially and federal domestically inspected meat products.

At the end of 1988, there were 83 mobile butchers registered, although only 14 were active. Mobile butchers reported slaughter of 1,055 cattle, 404 hogs and 35 sheep. These animals were not inspected and the regulations require that the meat from animals slaughtered by mobile butchers be consumed on the farm on which the slaughter took place.

Pathology Branch

Through veterinary laboratories located at Lethbridge, Airdrie, Edmonton and Fairview, the branch provided routine diagnostic services for animal owners and their veterinarians, transfer of information to producers, field disease investigations and applied research projects.

The veterinary pathology laboratories encountered a moderate decrease in their caseload because of the implementation of fees for submissions. The livestock population of Alberta continued to maintain an excellent standard of health. The provincial livestock herd remained free of exotic disease. Neonatal diarrhea was a minor problem in central and southern regions during the year, and pneumonias in feedlot cattle and swine operations posed problems on individual farms. *Hemophilus somnus* infections of feedlot cattle, particularly involving the heart, were more common during the fall than in previous years. Bovine virus diarrhea infection was more common in cattle in all regions, particularly the Peace River region. In poultry, decreased stocking densities due to quota reductions caused a general decrease in disease problems throughout the province. Sudden death syndrome and culling due to leg weakness problems continued to be important causes of production loss among broiler birds. By the end of the year, many producers were using a restricted lighting program for broiler birds and reported significant reductions in mortality and culling. Salmonellosis was a concern in several species this year causing disease in animals and, in occasional isolated cases, human infection.

A uniform method of investigating the cause of reproductive failure in cattle was developed this year. Two separate history questionnaires have been developed, one each for beef cow/calf operators and dairy farms. A kit was prepared and provided to veterinary practitioners. This allowed them to submit a comprehensive package to the laboratory to investigate nutritional factors as well as bacterial, viral and parasitic diseases which may be influencing fertility. A standard procedure for postmortem examination of fetuses was developed and adopted by all animal health division laboratories. The procedure provided a uniform approach across the province and will facilitate retrospective studies into reproductive diseases.

A research section was organized. This stimulated a number of projects from pathology branch staff. The administrative arrangements and resource requirements for Alberta Agriculture's Interdisciplinary Research Unit were organized and the first projects in this unit were underway by the end of the year.

The pathology branch agreed to undertake publication of a *Synopsis of Parasites of Vertebrates of Canada*.

CENTRAL PROGRAM SUPPORT

Central program support (CPS), the administrative body responsible for long-term agricultural stabilization programs, administered the Alberta farm credit stability program and national tripartite stabilization programs for red meat and specialty crops. CPS also administered, during 1988-89, the one year Alberta beekeeper disaster assistance program. In October, 1988, the administration of the Alberta farm fertilizer price protection plan was placed under CPS direction.

Programs administered by central program support were implemented to enhance the long-term profitability of primary producers.

In February, 1989, revised federal and provincial agreements were signed for the red meat stabilization programs. The new agreements resulted in increased producer enrollment and participation in the red meat plans. In March, 1989, the Alberta farm credit stability program was expanded to allow for increased loan eligibilities.

Under the national tripartite stabilization programs, the responsibilities of central program support were to confirm producer eligibility, process producer applications and enrollments, develop and maintain database systems, co-ordinate the collection of producer premiums and matching provincial premiums, and verify the accuracy of stabilization payments.

Alberta Farm Credit Stability Program

The Alberta farm credit stability program (AFCSP) was implemented on August 6, 1986 with the primary purpose of stabilizing the cost of credit to Alberta farmers. The program allows Alberta farm families to refinance farm-related debt, as well as borrow money for acquisitions and improvements.

The program was further expanded on March 1, 1989. The AFCSP has been extended to June 30, 1991 with an additional $500 million committed to the program, bringing the total program funding commitment to $2.5 billion. The amount of borrowing available to farm families, partnerships and corporations was increased with up to $250,000 of financing for eligible farm families under the program, and up to $750,000 for partnerships and corporations eligible, depending on the number of eligible farm families involved in the operation. The program was expanded to allow for the refinancing of debt incurred after August 5, 1986, where the debt relates to the purchase of eligible assets under existing program criteria.

Loans are written at a fixed rate of 9 per cent per annum for terms of 10 to 20 years.

During the 1988-89 fiscal year, there was a net increase of 4,032 loan authorizations, with a net increase in the total authorized borrowings of $254.1 million. Participating financial institutions advanced a total of $219.8 million on 3,538 accounts during the fiscal year.

The administration of the program remained as a joint effort between Alberta Agriculture and Alberta Treasury. Activities within central program support included interpretation and clarification of program criteria, and reviewing and authorizing requested loan amounts. Producer support was also extended in the form of loan counselling and referrals to regional farm economists and enterprise counsellors.

Alberta Treasury remained responsible for the flow of funds between the government and lenders.

SUMMARY OF ALBERTA FARM CREDIT STABILITY PROGRAM STATISTICS TO MARCH 31, 1989

AUTHORIZATIONS:		
No. of active loan authorizations	19,408	
Amount authorized	$1,796,146,270	
Average loan amount	$92,547	
LOAN ADVANCES:		
No. of loan advances	18,041	
Total amount advanced	$1,690,478,294	
Average loan advance	$93,702	
LOAN CATEGORIES:		
	Amount Advanced	%
Category "A" (Refinancing - same lender)	$1,001,151,311	59.2
Category "B" (Refinancing - other creditors)	$271,091,985	16.0
Category "C" (New acquisitions)	$418,234,998	24.8

Red Meat Stabilization

In 1988-89, Alberta was a signatory in three commodity price stabilization agreements for red meat: beef, hogs and lamb.

Alberta producers of beef, lambs, and hogs found feeding margins negatively affected by higher grain costs, a fluctuating Canadian dollar and increased North American red meat supplies originating from record low grain prices of 1987. In 1988, national tripartite support payments were triggered in four successive quarters for slaughter cattle, two quarters for feeder cattle, and three quarters for hogs and lambs.

In February, 1989, key amendments to the original federal/provincial agreements for the red meat stabilization programs were finalized. The new agreements introduced monthly calculations for the slaughter and feeder cattle options, eliminated late entry penalties for 1989 cow-calf enrollments, removed 80 index hogs from eligibility and formally introduced a new ewe flock option for lamb producers in Canada.

Non-participating producers were offered one-time opportunities to join the national plan with a reduced penalty. During the 1988-89 fiscal year, the Alberta government matched producer premiums totalling $3.52 million for cow-calf, $8.44 million for slaughter, $434,000 for feeder, $5.53 million for hogs and $33,000 for lambs.

SUMMARY OF RED MEAT STABILIZATION PROGRAM STATISTICS – JANUARY 1 TO DECEMBER 31, 1988

Plan	Alberta Producers Enrolled	Estimated % of Production Covered	Producer Premiums Paid('000)*	Stabilization Payments('000)
Slaughter	3,217	74%	$7,672	$62,711
Feeder	1,887	10%	$330	$858
Cow-calf	6,978	30%	$3,525	$0
Lambs**	378	31%	$50	$200
Hogs	4,060	91%	$5,476	$32,694

** Producer premiums are matched by the Alberta government and federal governments.*

*** Figures for the lamb plan are for the fifteen month period ending February 28, 1989.*

Specialty Crops Stabilization

National tripartite price stabilization programs for sugar beets and dry edible beans were signed by Alberta in 1987, with stabilization coverage commencing in the 1987 crop year for both programs.

Final stabilization payments for the 1987 crop were made during the 1988-89 fiscal year, totalling $4.93 million for sugar beets and $765,072 for colored beans. The Alberta government matched premiums of sugar beet growers amounting to: $175,582 representing the final premium adjustments for the 1987 crop; and $324,082, representing initial premiums for the 1988 crop. Producer premiums of $234,891 on 16,659 tonnes of colored beans produced in 1988 were also matched by the province during the year.

Specialty crop stabilization staff continued to work along with processors and producer representatives to improve program delivery and administration.

SUMMARY OF ALBERTA PARTICIPATION IN SPECIALTY CROPS STABILIZATION TO MARCH 31, 1989

Plan	Alberta Producers Enrolled	Alberta Enrollment as % of Canadian Enrollment	Estimated % of Alberta Production Enrolled	Alberta Enrolled Production as % of Canadian Enrolled Production
Sugar beets	460	47%	100%	69%
Colored beans	210	71%	100%	73%

SUMMARY OF ALBERTA FARM FERTILIZER PRICE PROTECTION PLAN PROGRAM STATISTICS - TO MARCH 31, 1989

	Applications Approved	Total Amount	Average Amount per Application
Fiscal year 1988-89	29,998	$18,867,499	$629
Total (Aug. 1,1984 - Mar. 31,1989)	117,217	$75,115,612	$641

Alberta Farm Fertilizer Price Protection Plan

The farm fertilizer price protection plan provided grants to farmers to reduce the cost of crop production inputs. During the fiscal year 1988-89, $18,867,499 was paid on 871,774 tonnes of fertilizer. The program was extended to July 31, 1989.

Alberta Beekeepers Disaster Assistance Program

The Alberta beekeepers disaster assistance program was implemented in February 1988 and provided a $10 per colony payment to help defray additional costs of accessing bee stock due to the closure of the U.S. border to the importation of honey bees. Initial payments of $1,414,630 were made from 1987-88 fiscal funds based on projections made by beekeepers on the numbers of colonies to be in production on July 1, 1988. A total of $300,250 was paid from 1988-89 fiscal funds to beekeepers who did not apply for initial payments and were in production on July 1, 1988 and to beekeepers whose July 1, 1988 production exceeded initial payment amounts. An overwintering component was also added, and a portion of fiscal year payments went to beekeepers who had eligible overwintering colonies.

An additional payment supplement was offered to beekeepers who had no colonies in operation in 1988 and to those whose 1988-operated colonies were less than the number operated in 1987. This payment supplement paid $10 per colony on 50 per cent of the shortfall in colonies operated. A total of $118,837 was paid through this supplement.

The total 1988-89 payments were $419,087.

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FIELD SERVICES

The major goal of the field services sector was to deliver technical and managerial information and services to rural Albertans. In doing so, it was successful in helping to improve the profitability of farming and in maintaining the quality of rural life.

A network of 66 district offices, administered and supported by regional offices at Lethbridge, Airdrie, Red Deer, Vermilion, Barrhead and Fairview, were effective in delivering information and services to meet the needs of local farmers, farm families and agricultural organizations.

The sector also included the rural services division and the information services division. Rural services was composed of the 4-H branch, home economics branch, the agricultural education branch, the agricultural engineering branch and the agricultural and community services branch. Information services was made up of the broadcast media branch, the print media branch, the library services branch and special projects.

RURAL SERVICES DIVISION

The rural services division programs and activities were carried out in line with the department's goals to increase the long-term profitability of primary producers and processors, to foster self-reliant organizations and to promote responsible management of soil and water resources. Five branches within the division carry out these activities.

The agricultural engineering services branch placed an emphasis on the need for water supplies. The severity of the situation necessitated the development of a water supplies assistance program, in co-operation with three other provincial departments. There was an overwhelming response to this program with 12,400 applications received. The Prairie Agricultural Machinery Institute (PAMI) in Lethbridge became part of the branch and was renamed the Alberta Farm Machinery Research Centre (AFMRC), with its mandate to research, evaluate and develop a farm machine program applicable to Alberta.

The home economics branch delivered technical information and services to clients and staff through numerous contacts and educational programs. Field staff were kept abreast through inservice training in the areas of food and nutrition and farm record keeping. The Explore Nutritious Alberta program introduced a resource package aimed at teachers of grade four to six. The Savor Alberta Flavor program developed a program planning handbook for district home economists. Research to evaluate protective wear for agricultural workers continued into its fifth year, with funding from Farming for the Future.

Agricultural service boards, agricultural societies, and agricultural development committees benefited through the administrative and operative support of the agricultural and community services branch. Funding of $4,040,000 was provided to 66 agricultural service boards for the execution of programs. Two hundred and fifty-two agricultural societies received operating grants, fair grants and monies from the Western Canada Lottery Corporation. Twenty six grants totalling $1,561,412 were provided under the agricultural initiatives program, funded by the Western Canada Lottery Corporation.

The agricultural education branch developed and delivered educational programs, relating to the extension of technology and development of the farm business. A review of the green certificate farm training program was carried out. One hundred and seventy certificates were issued, of which 42 were level II. The development of Agriculture in the Classroom materials continued. The *Business of Agriculture* series was completed. *Agriculture and Me* and *Pride in Alberta* were accorded recommended status as resources by Alberta Education. Nearly 4,000 persons were enrolled in thirteen home study courses. The farm safety program hosted the 1988 National Institute for Farm Safety convention.

The 4-H branch worked with 7,123 members and 2,571 leaders in 456 clubs. Enrollment was highest in beef, light horse and multi clubs. Over 700 members took part in provincially sponsored programs and 325 leaders participated in provincial leader programs. The 4-H scholarship program increased to provide scholarships valued at $41,300 to 61 4-H members. The average tenure of 4-H members dropped to 3.03 years from 3.1 years. The average age dropped from 13.1 years to 13.02. A major study of structure and delivery methods of the 4-H program was completed and submitted to the Minister of Agriculture.

Agricultural Engineering Branch

The optimism regarding water supplies during 1987 was short lived as below normal snowfall in all regions resulted in dropping water tables and severe water shortages for agricultural communities. A comprehensive response was developed across four government departments: Agriculture, Environment, Transportation and Utilities, and Forestry, Lands & Wildlife, to form a water supplies assistance program. The agricultural engineering branch developed and administered Alberta Agriculture's portion of the joint program, which included reimbursement for the dugout construction and rehabilitation initiatives, a water hauling assistance program and an expansion of the dugout pumping program. Response to the entire program was overwhelming with the department's portion leading the way, as far as farmer uptake was concerned. Over 12,400 applications for assistance were received during the year, compared to a two year total of 4,300 applicants during the previous initiative program. This was a clear indication of the severity of the water supplies situation, and resulted in an overloading of the construction industry with contractors unable to meet the demands in all areas. There were 8,000 dugouts constructed and/or rehabilitated during the year. Nearly 1,000 farmers were assisted by the water hauling program and 1,200 received help with dugout pumping.

There were over 2,000 dugout construction and rehabilitation projects pending, due to construction delays caused by lack of equipment or weather.

The extension of last year's experiment involving the colleges (Lethbridge, Fairview, Olds and Vermilion) in the delivery of the Computer on Wheels program has proven very successful. Over 120 hands-on courses were delivered on this timely topic, while still providing base courses on welding, mechanics and hydraulics. The inclusion of the colleges has led to other collaborative ventures in the area of curriculum planning and new course development, which will result in improved information available to the farming public.

The Alberta Farm Machinery Research Centre was established in April 1988, with a mandate to conduct evaluations, applied research and a development program for farm machinery applicable to Alberta. It operated in conjunction with the Prairie Agricultural Machinery Institute, its forerunner, to provide information for farmers on existing mechanics and to help manufacturers produce more efficient and effective equipment for farming operations.

Several workshops were sponsored in co-operation with the soils branch and regional specialists, on crop production management systems to conserve soil and moisture.

Project activity remained high during the year. Of particular interest was a joint project with the University of Alberta and the Environmental Centre at Vegreville on manure odor. Odor from intensive livestock operation was responsible for an increasing number of land-use conflicts. Extension personnel and land-use planners looked for options to deal with issues involving livestock facilities and adjacent non-compatible uses. This project is designed to provide the information needed to take a more active role in the land-use planning process with local authorities.

A major publication, *On Farm Grain Handling and Storage Layouts*, was produced last year. Peace River regional engineers from both Alberta and British Columbia co-operated with Edmonton staff in the production of the bulletin.

Home Economics Branch

The home economics branch focused its work in areas which supported the mission and goals of the department. With a core of eight permanent professional staff and a number of project staff, the branch provided leadership and services to a diverse clientele.

Technical information was delivered to staff and clients in a variety of ways. Individual contacts numbering 11,300 were made in person, by phone and letter. About 33 per cent of these were with clients and 67 per cent with staff. Of the total 134 educational programs presented by the branch head and specialists, 27 per cent were directed at field staff and 73 per cent at clients. In total, 3,100 people attended the programs.

Co-ordinating various provincial programs was a function of the branch. One such program was Explore Nutritious Alberta (ENA), a program directed at elementary school children that links food, nutrition and agriculture. An ENA resource package for teachers of grades four to six was introduced in the fall of 1988. During the past year, 1,625 elementary teachers participated in workshops provided by foods and nutrition specialists and district home economists. Two newsletters were prepared and distributed to teachers who participated in the workshops.

The program, You and Your Organization, a joint undertaking with the Alberta Women's Institutes concluded in December. Twenty-five workshops focusing on leadership development were held in 1988. Workshop leaders identified participants' needs for training in public speaking. The branch prepared a factsheet on opportunities for training in public speaking.

Two hundred women met at Olds College for the 58th annual Alberta Women's Week.

Involvement of the branch in the Savor Alberta Flavor program continued. A handbook for district home economists to use in planning programs to promote Alberta grown and processed foods was prepared. Support to the processing sector was also provided by the branch's test kitchen. Recipes were developed for eight Alberta food processors in addition to testing done for three other branches in the department.

Inservice training for field staff included a foods and nutrition update, which highlighted information on current food trends and nutrition issues and a food preservation workshop. All district home economists attended an ENA inservice which included presentations by representatives of five agricultural commodity groups. Training in farm bookkeeping was provided to district staff in a variety of ways including a workshop, programs at regional meetings, participation of specialists in district courses and individual consultations with district home economists.

Results from the 1987 Farm Family Expenditure Study (FAMEX) of 153 farm families were compiled. This was a follow-up to a 1986 study funded by Farming for the Future. A project on insurance and risk management evolved from the 1987 study. A survey on insurance for farm families was developed and gave direction to program development. Input and leadership was provided for assessment of farm records in Region IV.

Research to evaluate protective wear for agricultural workers continued into its fifth year with funding from Farming for the Future. District home economists assisted in contacting over 400 farmers for a chemical protective glove study. The use of geotextiles for weed control in dugouts continued to be assessed. A joint research proposal involving the University of Alberta, Agriculture Canada and department staff was submitted.

Linkages with the Alberta Heart and Stroke Foundation were established in the interest of accurate, clear and consistent heart health nutrition information with respect to foods. A new food class to foster heart health awareness, Heart Smart, was offered to agricultural society fair committees for the 1989 season.

A grant was provided to the Alberta Farm Women's Network to support the Second Alberta Farm Women's Conference. Grants were also provided to the Alberta Women's Institutes and Women of Unifarm for programming. A number of educational resources for clients and staff were developed by home economics specialists. Several staff provided input to a branch initiated home study course on home based business.

Development of materials on farm record keeping was a priority. Program outlines and participant handouts were prepared. A video, *Sold on Double Entry Bookkeeping*, a self study manual and a display were developed to complement the bookkeeping materials. A teaching package, *Take Your Financial Pulse*, was distributed to district home economists.

Other publications developed or revised included *Cooking for Profit* and *Losing to Win*. Farm office planning and design was the topic of an article for Farm and Country Magazine and for a television series on *CN Grain Train*. Efforts were also directed at developing materials related to human resource management on farms. A Personnel Management Assessment Tool was finalized for use by district staff.

Agricultural and Community Services Branch

The agricultural and community services branch provided human resource and financial support to three distinct community organizations in order to foster self-reliance in the rural community and to assist in developing and advocating provincial agricultural policy. The branch enabled local municipal government and local community organizations to plan and implement appropriate programs by providing leadership development and support, as well as financial assistance in the form of grants.

The agricultural services section provided administrative and operative support to agricultural service boards. Sixty-six agricultural service boards were allocated $4,040,000 in basic grants to assist them in the execution of essential programs in soil conservation, weed control, field crops, pest control, horticulture and tree planting, livestock improvement projects, training and extension. Under a federal/ provincial agreement and in accordance with individual agricultural service board requests, $190,000 was allocated to soil conservation projects. $15,000 was provided to municipalities located on the United States and British Columbia borders to prevent the spread of knapweed into the province. An additional $16,815 was distributed to assist agricultural service boards in limiting the spread of scentless chamomile and leafy spurge within the province.

Emphasis was placed on providing training to agricultural service boards, agricultural fieldmen, district agriculturists and board chairmen to increase their effectiveness in program planning, formulation of local agricultural policy, staff development and supervision. To accomplish this, 30 sessions were held with boards or board members across the province and 18 sessions were held with newly appointed municipal agricultural fieldmen. In addition, joint and individual agricultural service board program administration workshops were held throughout the northeast region. The workshops focused on the establishment of effective procedures and policy to deal with the program administration challenges facing boards.

To further assist boards in carrying out their activities, a provincial agricultural service board newsletter, a department directory listing resource specialists and an agricultural fieldman directory were circulated. The department directory served as a guide to local boards in identifying the appropriate technical resources during the planning process, and improved communication with government agencies and between individual boards. The agricultural fieldman directory was prepared in co-operation with the Association of Alberta Agricultural Fieldmen.

The policy of advancing 85 per cent of the annual grant allotment to agricultural service boards on the approval of the memorandum of agreement was maintained. Boards were given flexibility to transfer allocated grant amounts from one project to another, enabling them to make effective use of limited grant funds and to respond to the need for emergency programs. Provincial input into organizing, planning and resourcing regional and provincial agricultural service board conferences and training sessions for agricultural fieldmen, improved communications and increased the participation of board members and staff. The staff assisted various local, regional and provincial committees to plan, execute and evaluate conferences and tours.

The community services section provided support to 295 agricultural societies to enhance their effectiveness as self-reliant industry organizations. Support was provided through leadership and organizational training workshops, regular bi-monthly newsletters and resource materials. Agricultural societies encouraged the improvement of the quality of life of the agricultural community by sponsoring various courses and demonstrations, fairs and exhibitions and by operating community facilities.

Eight information meetings were held with various communities to provide preliminary information about the agricultural societies program. One hundred and twelve consultative meetings were held with new and existing agricultural societies to provide training and information on reorganization, leadership development, fund raising and facility development and operations. Staff also participated in conferences of the Canadian Association of Exhibitions and the Alberta Association of Agricultural Societies (AAAS). Two new agricultural societies were formed in 1988-89.

Community services staff attended seven regional fair planning workshops. These workshops provided training to fair judges and convenors of the many local fairs held each year. Funding was provided for a variety of fair judges at agricultural fairs and at Women's Institute competitions throughout the province.

The community services section supported and co-operated with the Alberta Association of Agricultural Societies (AAAS) in its capacity as the provincial umbrella organization for agricultural societies. AAAS co-sponsored the second Canada Packers Alberta Quilt Competition.

Programs such as exhibitions, fairs and displays received financial support. Financial assistance to agricultural societies to assist in the operation of multi-use community facilities was also provided. Operating grants to 252 agricultural societies totalled $1,363,880 and 175 fair grants totalled $260,513.

All agricultural societies in good standing received the third payment of grants under a five-year program with the Western Canada Lottery Corporation. A total of $4,940,000 was allocated to this program. Agricultural societies and other non-profit groups with similar objectives received grants for facility construction and programming under the Agricultural Initiatives Program funded by Western Canada Lottery Corporation. Twenty six grants, totalling $1,561,412 in expenditures, were approved.

The branch also administered the operations of agricultural development committees. The 61 committees are appointed by the Minister to hear appeals on Agricultural Development Corporation (ADC) loans and the disposition of public lands and to propose recommended action on these matters. In the last year, 158 new members were appointed to the committees to fill various vacancies. Six regional seminars were held throughout the province to provide an orientation to the agricultural development committee chairmen and district agriculturists. In 1988-89, a total of 100 meetings were reported; 46 loan appeals were reviewed and 62 public land lease appeals were reviewed.

Agricultural Education Branch

The branch was responsible for developing and delivering educational programs to support field services activities in the extension of technology and development of the farm business

There were several significant achievements this year:

- The first phase of an awareness program to develop curriculum-related, agricultural awareness handbooks for teachers was completed. The first two series of handbooks for grades one to six were accorded recommended status by Alberta Education and were in use in over 85 per cent of the elementary schools in the province.
- Work has begun on the development of an agricultural, educational and training strategy for Alberta, to be completed in 1989.
- A review of the green certificate farm training program was completed. While the policy recommendations of the review will be considered in conjunction with the agricultural education and training strategy, several operational changes were made to strengthen the program's ability to train workers for the 10,000 year-round jobs that now exist on farms.

"Agriculture in the Classroom" is an educational awareness program built around curriculum-related teacher handbooks for use in Alberta schools. The goals of the program are to update the image of the agriculture industry, to show its economic importance and diverse career opportunities, and to enable young Albertans to make informed decisions about agriculture in the future.

During the year, resource development was completed for the high school *Business of Agriculture* series. These included handbooks which supported Science 10, 20, & 30, Social Studies 10, 20, & 30 and a comprehensive handbook on careers in Alberta's agriculture industry to support Career and Life Management 20.

The junior high school resource, *Space Age Agriculture* was piloted. These included handbooks for grades seven, eight and nine Science, Social Studies and Agriculture/Land and Life. Initial response has been positive.

Use of the resources was encouraged by presentations of workshops for teachers at conventions and professional development days. The seasonal *Agriculture in the Classroom* newsletter has increased distribution to more than 10,000 teachers. It contained additional lesson ideas and updated resource information.

New posters and brochures were published to support the program, one for each of "Business of Agriculture" and "Space Age Agriculture" as well as two teaching posters on career choices and further education routes to agriculture- related careers. A brochure, *What is Agriculture in the Classroom*, was developed to introduce the program concepts and resources to educators and other interested individuals.

Two audio-visual productions were completed to give visual support for the elementary handbooks. *A Visit to a Rural Community* targets grade one to three audiences, while *Alberta a Good Place for Agriculture* was designed for grades four to six. Videos on these topics will be available for Alberta schools in September '89.

Alberta Education has completed a review of the "Agriculture and Me" and "Pride in Alberta" resource series. They have been accorded a "Recommended" status as resource materials and will be included in the published resource lists from Alberta Education.

The green certificate program continued to provide training in the technical and managerial skills required of permanent farm employees or aspiring farmers. This apprenticeship-style, adult education program continued to co-operate closely with more than 300 Alberta farmers who provided training facilities, teaching services and took on certification and testing duties.

The special arrangement with Alberta Career Development and Employment's Alberta Training Program continued to provide funds to co-operating employers for the work of training.

The program averaged a population of 192 trainees on-farm sites throughout the province. This was lower than the previous year due in part to the residual efforts of limited field staff resources. A total of 170 certificates were issued of which 42 were for Level II graduates. This result is attributed in part to an increased offering of technical and managerial courses specifically designed for trainees.

A special project on feedlot training skills started in the Lethbridge area. This Level I training is structured and scheduled, and will be completed in March of 1990.

Improvements in program procedures and record keeping occurred during the year along with an improved ability to provide program statistics for analysis. In addition, a major review of the program was conducted including significant opportunity for farm industry input into new procedures and plans.

A career track review of trainees who left the program between April 1, 1986 and March 31, 1987 showed that 95 per cent of the trainees who completed Level II were still employed on farms. It also showed that the higher the level of training, the greater the percentage who remain employed on farms and that the unemployment rate of trainees declined as the amount of training increased.

The primary purpose of the home study program was to develop and maintain educational programs for self study by farmers and farm families as well as for use as a resource support for the delivery of extension programs in the field. Understanding Profit, The Business of Farming was developed during the year. *The Beef Herd Management Reference Binder and Study Guide*, developed in 1987, continued to be popular. The Dairy Production and Beef Herd Management courses as well as the sheep option of the Animal Health course were revised during the year. Total enrollment during the year for the 13 available home study courses was approximately 4,000.

More emphasis was placed on evaluation in the home study program. Advertising and promotional strategies for courses were reviewed and an evaluation on the educational impact of the Understanding Profit course was also initiated.

Agribusiness continued to use home study courses for staff training. Alberta Wheat Pool employees enrolled in the Crop Protection course. Federated Co-operatives employees took the Animal Health course. Other companies made use of the Understanding Profit, The Business of Farming course.

The agriculture manpower programs unit provided temporary work experience to train young people both within Alberta Agriculture and on farms. Positions in general research, laboratory technology, special projects and farm labor provided work experience to complement academic endeavors and assist individuals in developing career paths.

This unit focused on delivery and development of programs to provide career related experiences for high-school and post-secondary students. Additional services included career counselling, placement, administration, monitoring for all "experience" programs.

The following programs were administered by the agriculture manpower programs unit.

AGRICULTURAL MANPOWER PROGRAMS

Programs	Positions
Agriculture work experience	12
Summer temporary employment	85
Priority employment	43
Veterinary work experience	30
Summer farm employment	800
Employment skills	20
Special placement	3

Approximately 700 potential employees were screened, counselled or placed through this unit for programs other than summer farm employment.

Review and processing of Agricultural Entrepreneurial Immigration and Canada Investment Review proposals increased due to the growth of merger acquisitions and Asian investment developments.

A job exchange program was established with the Alberta Career

Development and Employment. The primary benefits of this exchange were:

a) an opportunity to enhance skills and gain experience in the career development field

b) this exchange will strengthen the ties between Alberta Career Development and Employment and Alberta Agriculture and provide improved access to programs and services that benefit the department.

Highlights for the farm safety program in 1988 included hosting the Summer Meeting of the National Institute for Farm Safety in Edmonton. Papers were presented at the annual meeting of the Canadian Paediatric Society and at the National Safety Congress held during the annual meeting of the National Institute for Farm Safety in Orlando, Florida. The manager of farm safety provided the keynote address at FarmSafe '88 – National Conference on Rural Health and Safety in Armidale, Australia during July, 1988. A paper was also submitted and published in the proceedings of The Arab Society of Occupational Health and Safety Conference in Cairo, Egypt.

Two-hundred and two farm safety workshops, seminars and special programs were conducted around the province, with a total of approximately 8,000 farmers, farm families and farm workers in attendance.

There was continued support from volunteer organizations such as Alberta Women's Institutes, Women of Unifarm, the Farm Equipment Dealer's Association of Alberta and British Columbia and Alberta Flying Farmers. Interaction with these groups enabled the successful organization of programs such as the 1988 Farm Safety Hike.

Sponsorship from Esso Petroleum Canada aided in the development of a number of innovative publications, including the pop-up, *How Safe Is This Farm?*. As part of the emphasis on hazardous materials safety, the brochure, *Scratching the Surface on Anhydrous Ammonia, Safety,* was produced.

Alberta Power Limited and TransAlta Utilities Corporation provided both financial and creative assistance for the 1988-89 edition of *A Child's Guide to Farm Safety*. The 47,500 copies printed had to be rationed, as the demand exceeded 55,000. The video, *A Teacher's Guide to Farm Safety* was produced and distributed to school superintendents this year in order to better acquaint teachers with the farm safety rural school program.

The success of the farm safety program has been felt among members of the rural community, as the number of fatal farm accidents decreased from 18 in 1987 to 12 in 1988, making it the second year in the last three to record such a major annual decrease.

4-H Branch

The emphasis of the 4-H program continued to be in four major areas: project revision and development; 4-H promotion, including member and leader recruitment; the delivery of support and training to adult volunteer leaders; and communication and personal development training.

The 4-H branch worked with 7,123 members and 2,571 leaders associated with 456 4-H clubs.

Individual projects remained the focal point for 4-H members. Thirty-two projects were offered with the highest enrolments in the beef, multi-project and light horse clubs. New educational manuals in the foods (junior nutrition) and crafts (junior crafts) projects were introduced. Revisions in light horse, beef and dairy materials were completed. Craft, foods, canine and sheep materials were in development.

Harold Anderson of Irricana and Georgina Taylor of Chauvin were inducted into the Alberta 4-H Hall of Fame. Twenty-eight 4-H leaders represented Alberta at various national and international leader training/recognition programs.

Two hundred and ninety-seven 4-H leaders attended the Alberta 4-H Leaders' Conference in Red Deer. A Leader Focus Group, held in conjunction with Leaders' Conference, attracted twenty leaders.

One hundred and forty-three senior 4-H members dealt with the money management theme "Understanding Today for Building Tomorrow" at the provincial selections program. Sixty-four of the delegates received award trips to attend provincial, national and international programs.

The personal development club week program attracted 104 members. One hundred and eighty members attended three "Way With Words" weekend communication training seminars. The first year program People Developing People (PDP) was attended by 61 members.

Fifty-four Alberta 4-Hers studied current environmental issues at conservation camp. The annual highway clean-up campaign cleaned over 9,000 kilometres of roadside and collected more than 67,000 bags of litter.

The provincial beef heifer show attracted delegates from 46 4-H clubs, while 15 clubs participated in the provincial 4-H dairy show.

Approximately 55 members attended the Provincial Judging Clinic in Edmonton.

The "Leadership Through Counselling Seminar" (LTCS) trained 88 senior 4-H members to serve as junior camp staff. Almost 900 4-H members participated in 15 camps held at various locations throughout the province.

The 4-H scholarship program increased this year to provide 61 4-H members with scholarships valued at $41,300.

Cleaver, the 4-H mascot, appeared at many local and regional 4-H functions including the Edmonton Klondike Days Parade.

The 1988 Premier's Award Recipient, Lisa Properzi of Westlock, Alberta, toured Alberta throughout the year recruiting new members and speaking at club, district, regional and provincial events.

4-H staff continued to provide training seminars on topics such as 4-H administration, judging, personal development, leadership, project skills, teaching techniques, and communication training to 4-H members, leaders and parents. District, regional, provincial and national 4-H councils were active throughout the year. Seven regional 4-H specialists co-ordinated the delivery of the 4-H program at the local, district and regional levels.

A major study on the effectiveness of current structure and delivery of the 4-H program was completed. Recommendations from "4-H: A New Tomorrow" have been submitted to the Minister.

SUMMARY OF 4-H CLUBS BY PROJECT (1988-89 CLUB YEAR)

Club Project	No. of Clubs
Beef	169
Canine	1
Clothing	18
Computer	1
Crafts	7
Dairy	12
Field crops	1
Foods	10
Gardening	2
Light horse	73
Multi-project	142
Outdoorsman	2
Photography	2
Pheasants	1
Small engine	5
Sheep	6
Swine	2
Woodworking	1
Other	1
Total	456

Educational/Consultative Client Contacts by Subject Area

MEDIA CONTACTS

	Items[1]	Contacts[2]
Branch Staff	102	6,999
Regional 4-H specialists	302	757
Total	404	7,756

[1] *No. of items (e.g., news releases, radio talks) produced.*

[2] *No. of media outlets contacted.*

CLIENT CONTACTS

	Individual Contacts	Major Meetings		Educational/ Consultative	
		No.	Attendance	No.	Attendance
Branch staff	21,196	104	2,771	175	9,067
Regional 4-H specialists	24,943	328	6,553	1,754	47,586
Total	46,139	432	9,324	1,929	56,653

ALBERTA 4-H CLUB MEMBERSHIP BY PLACE OF RESIDENCE (1988-89 CLUB YEAR)

	Female	Male	Total
Farm	2,781	2,677	5,458
Rural non-farm	535	248	783
Urban	675	207	882
Total	3,991	3,132	7,123

Total number of clubs = 456

Average age of 4-H members = 13.02

Total number of members = 7,123

Average tenure of 4-H members = 3.03

Total number of adult volunteer leaders = 2,571

INFORMATION SERVICES DIVISION

The Information Services Division provided information to the agriculture industry and the general public on department programs, policies, production and marketing through print and electronic media. It also produced support material to assist Alberta Agriculture staff in delivering programs to farm families. The division provided organizational support and publicity for special events such as Agriculture Week and the Alberta Agriculture Hall of Fame. Assistance was also provided to producer groups and agricultural organizations.

Broadcast Media Branch

The broadcast media branch produced a daily radio program and several videotapes productions throughout the year. It also provided film and video lending services, an audio-visual production service and counselling and training in effective use of broadcast media. The branch participated in training workshops on communications skills and dealing with enhancing radio and television presentations.Two hundred and sixty-one *Call of the Land* programs were produced in 1988-89 and were aired on 15 AM and eight FM stations in Alberta to a daily listening audience of over 55,000. More than 900 separate stories were aired on the programs. *Call of the Land* is fed daily by satellite to all stations except CKUA.

Twenty-nine video tapes were produced. These included 19 extension videos and six vignettes for the *Agriculture Hall of Fame*, two vignettes for *4-H Hall of Fame*, four slide shows (two transferred to video), and the standardized computer animated logo and copyright information.

Over 4,700 films, slide kits and videotapes were loaned to schools, 4-H Clubs, department staff and other organizations. In addition to titles produced by or for Alberta Agriculture, over twenty more were purchased and added to the film library.

The branch provided an audio-visual service to department staff. Overhead transparencies, slides, flipcharts and sound tracks were produced to enhance staff presentations. Work continued on preparing the placement of a 35,000 slide collection on a computer for easy access. This photo library provides services to our department, other government departments and agencies, schools, media, publications etc. There were 254 requests for slide searches to our photo library, 628 artworks, 301 overhead transparencies and 372 custom slides were produced. There were 379 photo orders processed and placed with audio visual services and private photo labs.

The district office video library project was a great success. Thirty-one district video libraries have been set up throughout the province. Broadcast media provided each video library with a starter set of forty videos.

Print Media Branch

The branch provided technical information on agriculture to farmers and others in the agriculture industry, and general information on agriculture and food to the public. Staff of the department and associated boards and commissions were provided with advice and training in effective print communications, and editorial and publishing services.

Agri-News, a weekly news release package, provided 528 articles to media facilities and other recipients. Special press kits were prepared for the Agriculture Hall of Fame, Agriculture Week and Soil Conservation Week. Thirty-three press releases for ministerial announcements and other special releases were prepared and distributed throughout Alberta. Other press services provided were advice on the effective use of the media, and assistance with the editing and rewriting of columns and articles for field staff.

One hundred and fourteen new and revised technical publications for farmers and their families were issued. A bi-monthly listing of these extension publications, *What's New In Publications* was produced and sent to 5100 persons in the agriculture industry. Numerous other reports and promotional publications were also published. Assistance was provided with the development and placement of the department's advertising.

There were 328 printing jobs placed with commercial printers and supervised by branch editors. The in-house duplicating shop printed a total of 21.0 million pages for the 1,396 jobs it handled.

More than 1,200 different publications on commercial farming, home economics and gardening were available to the public from the print media branch and field offices. There were 601,684 copies of publications distibuted. The branch responded directly to 12,862 requests from the public and handled 3,573 orders from field offices for publications.

Staff graphic artists handled 189 design jobs for the department's printed and audio-visual materials.

The branch produced four issues of the department's staff newsletter, *Agknowledge*, for distribution to all staff.

Library Services Branch

The library services branch provided a broad range of information services to department staff as well as to the agricultural sector in Alberta.

In 1988-89, the library system consisted of the main library in Edmonton and 15 regional and branch libraries throughout the province.

Demand for branch services increased by an average of 23 per cent over the previous year. This increase was felt in reference services, circulation of books and other materials and interlibrary loan requests made to other institutions on behalf of department staff. The number of online search requests increased dramatically from previous years.

Library Recent Additions continued to be the major vehicle for alerting department staff to new materials acquired by the library. A number of subject bibliographies were prepared, highlighting library resources on topics of current interest. These were well received. Indexes were prepared for the periodical holdings, including Statistics Canada publications, U.S. Department of Agriculture serials and the agricultural newsletters collection A library bookmark promoting the branch's services was prepared and distributed to all professional staff.

New policies and procedures for circulation of library materials were developed and communicated to department staff and external patrons. An inventory of the Agdex collection. was conducted as was a full survey of the periodical holdings in the O.S. Longman laboratory building.

The library participated in the development and maintenance of the SCITECH database, a co-operative computer catalogue of the book collections of Alberta Agriculture, Alberta Environment and Alberta Research Council libraries. Three microfiche cumulations of the catalogue were produced and distributed to branch libraries. Online use of SCITECH continued to increase.

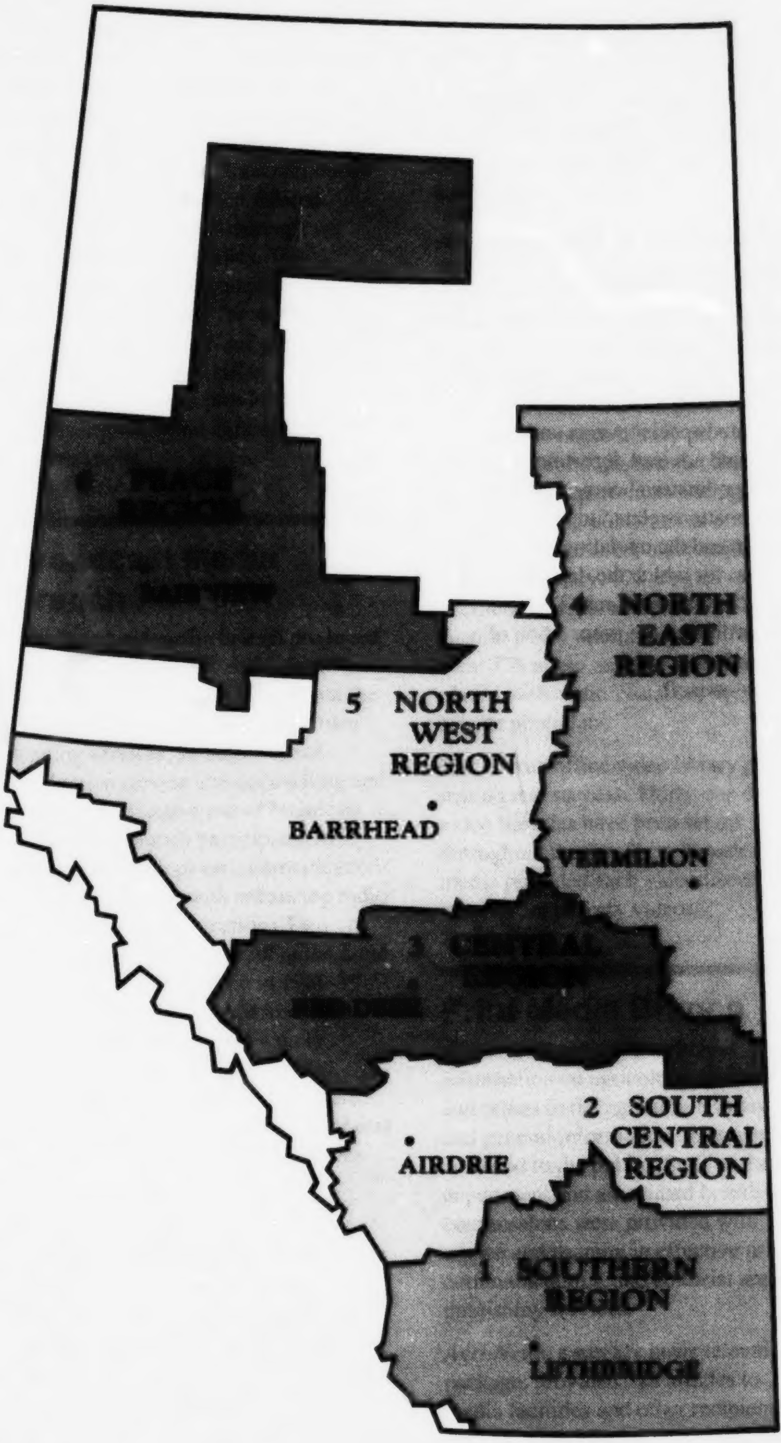
Library orientations were provided throughout the year for new employees, including project staff. In March, a research methods workshop was held for department staff whose responsibilities included conducting original or applied research.

Library staff participated actively in local and national library organizations, including membership on the Alberta Government Libraries' Council, an inter-departmental committee.

Special Projects

The special projects unit provided information retrieval and communications support to the Ministers' offices. The unit co-ordinated special events and displays and advised department staff regarding ministerial correspondence. As well, matters related to legislative procedure and the up dating of existing legislation for which the department is responsible were research. The unit also co-ordinated the preparation of ministerial orders and orders-in-council.

Map of the six Alberta Agriculture Regions


6 PEACE REGION
FAIRVIEW
5 NORTH WEST REGION
BARRHEAD
4 NORTH EAST REGION
VERMILION
3 CENTRAL REGION
RED DEER
2 SOUTH CENTRAL REGION
AIRDRIE
1 SOUTHERN REGION
LETHBRIDGE

REGION 1

Southern Region Lethbridge

In 1988-89 the drought was the single most important driving force behind extension, program and staff activities. The usual historic flow patterns of client requests and staff activities was disrupted by the very early spring and subsequent drought.

Staff responded to the many drought related client requests from the record early irrigation start-up to problems with crop emergence, weeds and insects, and water rationing. Staff dealt with numerous calls from dryland producers revolving around poor crop establishment, determination of optimal herbicide timing to suit a multigrowth stage crop, evaluation of crops to determine whether to harvest or cut for feed and fall management of crop residues to minimize erosion potential.

The drought caused a great strain on the entire irrigation system in the region. The first noted irrigation occurred on April 12, 1988. This was more than two weeks ahead of the previous record. Systems were shut down due to freezing temperatures at night, causing wasted water to spill back into the rivers. The irrigation system was not able to keep pace with the hot weather and drying winds. The system was designed to provide supplemental water, not the total crop requirements. As a result, many of the crop yields were only 75 per cent of normal, and farmers were faced with energy costs which were up to four times that of normal years.

To preserve some water for the 1989 year, some irrigation districts placed a water restriction on their users, allowing only 3.6 acre inches of water to be used from August 1, 1988 to the end of the season. Producers had to manage their applications very carefully to attain the greatest economic advantage.

Hay crops had a poor start in the spring because of the extreme dryness. Once the irrigation water was turned on, alfalfa recovered to a near normal first cut. Second and third cuts were normal to slightly above normal where water was available. Non-irrigated pasture and hay produced little after June.

The 1988-89 crop year saw special/alternative crops reach their peak of popularity in Alberta due in large part to the depressed cereal prices experienced in the past several years. There were over 400,000 acres devoted to special crops in Alberta in 1988-89. Gross value of Alberta special crops grown in 1988 exceeded $105 million dollars.

The year was exceptional for warm season irrigated crops such as dry beans and corn, which achieved very high yields (individual field averages of 3,400 pounds per acre for dry beans and 140 pounds per acre for grain corn). Dryland special crops did not fare as well, with hot, dry conditions prevailing at seeding time.

New crop development efforts have centered on the extraction of essential oils from monarda, peppermint and spearmint. The effort has consisted of agronomic, marketing, economic and communication activities. Commercial processing should begin in the summer of 1989. Other new crop development efforts include solidification of the safflower industry in southern Alberta and initial viability studies on lupines and spice crops.

Data from the Special Purpose Pea Co-op and the grain performance trial were used for recommendation and registration of new varieties. A 15-minute video was developed from the alternative harvesting program on dry beans, peas and lentils utilizing the John Deere combine loaned to Alberta Agriculture. Over the three-year program, irrigated canola trials demonstrated a yield advantage of Global canola and the yield potential of irrigated canolas in general.

The drought played havoc with dryland soil salinity work. Dry conditions resulted in a general drop in the water table. The dry conditions also made vegetative control of dryland saline soil very difficult. The dryland salinity investigation service received nine applications. This brings the total of farmer clients to 191, with 238 projects. The County of Warner has the largest number of projects, with 115. The Counties of Vulcan and Forty Mile follow, with 45 and 31, respectively.

An assessment of salinity projects was completed in 1989. The total recommended acres of forage were: alfalfa for recharge acres, 10,611; grass for discharge areas, 5,830 acres. A telephone survey showed a 61.1 per cent implementation of recommendations. The soil conservation area program (SCAP) is one source of funding used by agricultural service boards to assist farmers in implementing controls. There were 17 applications for SCAP projects in Region I in 1988.

The Russian wheat aphid was a new concern but was not found in the region until mid-summer. Economic damage was confined to fall seeded winter wheat and grazed regrowth in irrigated cereal silage fields. The cold winter and cool, wet spring killed off the Russian wheat aphid population and prevented a much more serious situation for the spring of 1989. The unexpected stink bug infestation in the northeast corner of the County of Vulcan No. 2 caused much more physical and economic damage than the Russian wheat aphid. The brown wheat mite infestation continued, but the dry year seemed to stifle the damage potential of this pest in cereals.

Weed control in the region was highlighted by a very successful project using sheep as a biological control agent against leafy spurge along the St. Mary's River. This project was co-operatively managed by landowners, sheepmen, the M.D. of Cardston, the Blood Reserve, Alberta Agriculture and several other provincial government agencies. Further work was done with the Blood Band on weed identification and control, as well as on beef production.

The beef industry was also affected by drought, with many cow calf producers weaning early and putting calves on feed, sending yearling cattle directly to the feedlot as well as culling heavily. Some producers were forced to provide supplemental feed throughout the summer, and at the end of March 1989 had been feeding their herd continuously for 18 months. Water also became a problem. Under the provincial water pumping program, some 400 dugouts were filled for livestock water supplies. Many more producers used the water hauling portion of the program.

Lower hay and grain prices in 1988 led to less land being committed to hay production. Summer drought conditions forced some producers to graze hayland. A hard winter in 1988-89 caused hay prices to increase to $85/tonne by the fall of 1988 and $100/tonne by the spring of 1989. Recent mild winters had lessened the demand for straw. The harder winter this year and lack of straw led to more frostbite problems with dairy cows and beef breeding bulls.

The lack of late summer and fall rainfall, along with little early snowfall accumulation, led to speculation that the lack of dugout water supplies would seriously limit grazing in 1989, especially on the larger grazing reserves. Runoff from recent snowfalls filled dugouts to a capacity of about 75 per cent. This situation has almost guaranteed cattle placed on these reserves with the amount of grazing determined by range growth.

The drought and the subsequent overgrazing of native ranges depleted the range cover. This lack of cover led to more snow blowing off the range, higher runoffs during spring melt, and the potential for high summer evaporation rates.

The spring's higher feed prices with resulting lower feed reserves resulted in cattle going on pasture early. Early grazing will limit total range production.

Drought conditions led to more open cows and higher culling rates. More cows went into winter in poorer condition. Increased feed prices, along with a hard winter resulted in more nutritionally-related health problems associated with calving. Despite altering management practices to overcome scour problems, some producers still experienced substantial losses.

Extension activities were dictated by the drought situation. Several southeastern locations had cow and calf nutrition seminars last summer. Ration formulations for beef cows with sucking calves served to illustrate the increased need for nutrition work dealing with larger cows, milking at higher rates and having larger calves.

Much of our range has been evaluated in terms of animal units, an animal unit being defined as a 1000 lb cow nursing a 300-400 lb calf and milking about 10 lbs/day. This type of evaluation has led to serious over-evaluation of pastures that has only become apparent because of the drought situation.

Profit margins in the feeding industry were slim and variable in 1988-89. Most fed-cattle producers would be in a negative position without the stabilization programs. Higher replacement prices resulted in most of the stabilization benefits being passed onto the cow-calf industry. Recent increases in interest rates led to some downward pressure on the cost of replacements. It is still apparent that factors other than replacement prices have a disproportionately larger effect on cattle feeding decisions.

Since the fall of 1988, feed and replacement prices have led to most feedlots remaining fairly current in their marketings. Carcass weights are lower than they were in the spring of 1988, with fewer carcasses in the fatter grades and fewer overweight and overfat cattle going to the United States.

Declining hog prices and increasing feed prices had the hog industry under pressure. A major area of work during the year has been consultations with producers on a one-to-one basis both in the office and on farm calls. The HOGCAAF computer model has been used extensively over the year to enable clients to analyze their operations and predict the results of changes in operations or management routines. It enabled clients to make sound decisions, with a realistic "bottom line" as the major factor of consideration. Producer discussion groups are underway at Oyen and Medicine Hat.

A veterinary swine workshop was held, with 22 veterinarians from the southern region attending a day of workshop discussion on all areas of swine management and herd health.

The dairy industry continued to expand and prosper. Staff were consulted in 14 instances on designs for new, remodelled or updated facilities. Demonstrations on free stall flooring and the use of cow pillows were conducted at four locations. Because of the high capital requirements for the dairy industry, staff maintained close contact with financial institutions and consulted on the feasibility of cash flows and income expectations for dairies. The DAIRY REV computer program was used on nine dairy operations to outline estimated income and quota requirements. Another 12 operations were assisted in analyzing their financial and quota management situations. Research continued on producer-identified problems. A co-operative project was undertaken between Agriculture Canada in Lethbridge, Hoffman La Roche and Alberta Agriculture staff on the problem of off-flavors in milk and its relationship to vitamin E and high fat diets. In-depth consultation was also undertaken in the area of nutrition and herd health and management.

There was a continued emphasis on financial management. Nine district offices conducted 13 Gear Up Financially courses for 140 farm units. The other three offices conducted individual workshops and sessions for a number of clients using the Understanding Profit home study course. In addition, seven accounting courses were conducted in the region, with a total attendance of 69 farm units. Financial management programs included Gear Up Financially, record keeping courses, computerized accounting and understanding profit. Home-based business programs also dealt with financial management. Programs were co-ordinated to optimize the use of staff time as well as to ensure people from all districts could participate.

The next biggest single time commitment was the farm consulting program. Forty-three farm clients were matched with consultants last year. Consultants were required to probe deeper into the financial affairs of their clients, looking for possible solutions through use of debt write-off, security trading, consent foreclosure and quit claim. Each report was reviewed with the regional farm economist before presentation to clients.

This year saw an increased interest in lectures on solving family relations problems. These requests came from the Gear Up Financially courses. After each lecture, one or two families made appointments to receive counselling privately. Due to the increased stress caused by low farm incomes and technology change, this area could require more time in the future.

The greatest demand placed on the engineering staff was water requests resulting from the drought. These included water source development, storage, pumping and quality testing. The programs involving both regional and district staff included dugout construction and rehabilitation, emergency water pumping, water hauling, and dugout site testing. Five months of additional labor were required to meet this demand. On larger projects, staff worked in co-operation with Alberta Environment to set up groups, determine equipment requirements and complete the pumping on 12 large projects.

High demand continued for consultation on livestock building structures and environments. Consultation on swine facilities was most popular, followed by dairy, sheep, beef and poultry. Many of the client requests involved upgrading the ventilation system to include air recirculation in the barns. Interest in new facilities was limited.

A pilot project on living with farm machinery electronics was developed. Four pilot workshops were held and the result from these allowed modifications to be made to meet the needs of the farmers.

The implementation of the Canada-U.S. Free Trade Agreement had no immediate direct effect on farmers. Indirectly, however, it created a growing awareness of the need to develop marketing skills and expertise. Marketing extension tended to revolve around the Cattle Sim and Future Sim simulations, Gear Up Financially workshops, commodity association workshops and district sponsored meetings, with 19 sessions held in the region.

4-H promotion in the form of a media campaign, mall displays and displays at trade fairs, county fairs and achievement days have been successful in increasing the number of clubs. Sixteen new clubs were founded while 10 folded, for a new total of 92 clubs with 1,370 members, led by 406 leaders. The member numbers were up slightly, while the number of leaders increased over 20 per cent. This, coupled with the trend to the multi-club concept, where clubs offer more than one project area, presents a challenge in training, developing and programming for these new leaders. Beef, light horse and clothing were the top three project areas for the year. Members and leaders participated in 34 district workshops and 12 regional programs. The 4-H alumni continues to be a tremendous asset to the program in the region. They co-sponsored both the winter camp and the leaders' recognition night, acted as judges and resourced many of the workshops.

Home economics programming concentrated on two areas, product promotion and financial management, which accounted for 40 per cent and 20 per cent of the courses, respectively. There were four Savor Alberta Flavor promotions alone reaching 6,650 people. Another 4,500 people were reached at other product promotions, including farmers markets and commodity specific events. As well, many people visited the district home economist booth at the Alberta Special Crops and Horticultural Research Center field day and the Ministers' display at Ag-Expo.

The Waterton Housewives Conference was held in October. The organization of the 1989 conference was delegated to a committee of farm women, with representation from Alberta Agriculture and the Lethbridge Community College. Eight districts have one-day women's conferences planned for the upcoming year.

Most districts had Explore Nutritious Alberta programs and several district home economists reached the majority of schools in their area with program information. Farm safety and protective clothing programs were conducted in most districts. Often these were co-sponsored by Women's Institutes or 4-H councils. There were 33 workshops held for 4-H leaders and members, with 951 participants. District home economists attended 70 4-H council meetings and 39 other 4-H events including shows and sales, awards nights, exchanges and camps. District home economists worked with agricultural societies on local fairs, looking at organization, classes, judging and special events. Some agricultural societies started to co-sponsor programs with the district offices, expanding their role beyond running fairs.

Housing programs were more in demand this year. Half of the people enquiring looked at remodeling existing homes, while the other half looked into building new homes.

The green certificate program was in the second year of bi-regional duties for the farm training specialist. The average number of training situations dropped to 27 for Region I. The number of certificates achieved in Region I was 18 in Level I and 13 in Level II. There were eight courses and six seminars held in the two regions. In January a pilot project for training feedlot employees was initiated. Many new procedures are being tried. The project will mean the addition of 20 training situations.

In Pincher Creek the construction of the co-op seed cleaning plant was completed in February of 1989 and opened for business the same month. The cost of this basic plant was $535,000.

Warner was the centre for Russian wheat aphid investigation over the summer. Field monitoring of this pest was a priority for farmers and staff. Fields seeded to winter wheat or fall rye under the green feed program were hit hardest by the Russian wheat aphid so there was little forage value left.

Hairy nightshade is becoming a major weed problem in bean fields in the Bow Island area. A major awareness program over the winter and a herbicide trial program were proposed to help farmers cope with this problem.

Sugar beets got off to a relatively poor start but, due to the warm weather, produced an above normal crop, averaging 19.2 tonnes per acre. Under the new contract being negotiated producers were paid for the sugar produced rather than total tonnage of beets. Farmers sought advice on how to maximize profits under these new conditions.

The third annual Passport to the Future Conference at Vulcan featured global futurist Frank Ogden. The impetus from this program resulted in the development of a rural diversification program in the county in co-operation with the Lethbridge Community College. The hope is to stimulate local economic development and to halt the decline in the rural population in the county.

Ag-Expo 1989 again proved to be the premiere farm show in southern Alberta. Attendance was down due to inclement weather. However, with the addition of more exhibit space, the quality of the 300 booths was up. The seed fair received a record number of entries.

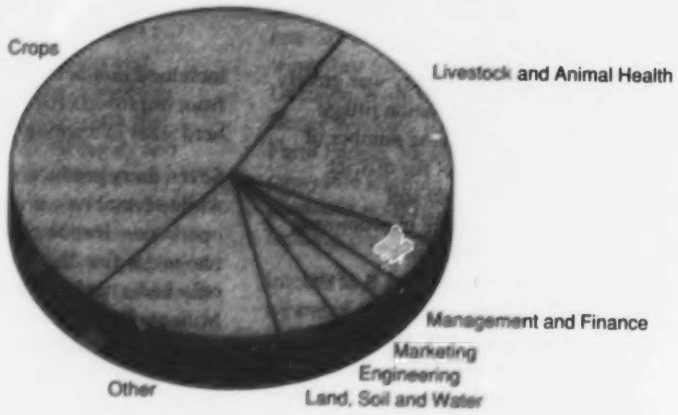
The need for irrigated forage information was emphasized with the Brooks, Medicine Hat, Lethbridge and Strathmore offices co-operating in bringing in an expert from North Dakota to challenge the top producers to even greater productivity.

Video libraries have now been established in six district offices. Help and support have been provided by local agricultural service boards in obtaining equipment for the district offices. This was a major way of extending technical information and the demand for the service has increased sharply.

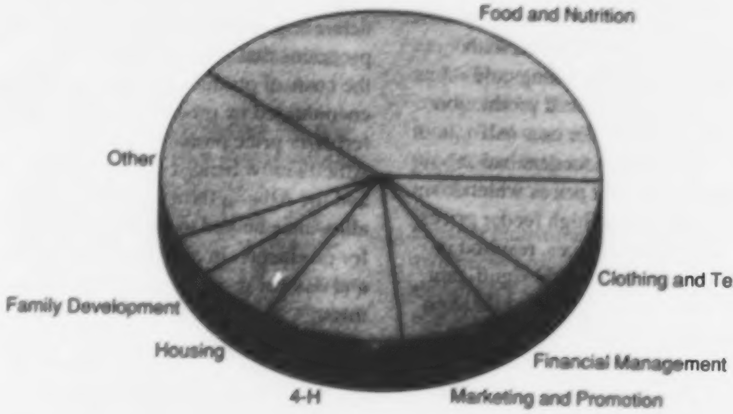
NUMBER OF CLIENT CONTACTS:

Interviews	34,639
Telephone Calls	38,212
Farm Visits	3,843
Letters	6,895
Educational Programs	750
Attendance	15,036

Region 1
Agricultural Client Contacts



Region 1
Home Economics Client Contacts



REGION 2

South Central Region Airdrie

Field crop production in 1988 had a bad start. There was very little moisture carry-over from 1987, snowfall and spring rains were below normal. As a result, farmers delayed their field operations in order to avoid drying out the seedbed. Seeding was also delayed in the hope of receiving rain, but when no rains came, crops were planted deeper than normal in order to seed into moisture. The overall result was poor or very uneven germination. Early June rains in the region, except the eastern portion, were beneficial to the crops, but promoted excessive weed growth. Many canola fields were plowed under and reseeded. Canada thistle and sow thistle did very well and many infestations became quite severe by mid summer. July drought conditions, followed by excessive rains in August, caused uneven crop maturity and harvesting difficulties in September. In general, yields ranged from about 70 per cent of normal to as low as zero in the eastern area. Hay and pasture production was reduced in early summer but rescovered well in August. Hay yields were reduced; first cuts were only 40 per cent of normal. The increased availability of green feed offset this short fall, and adequate feed supplies were available. Forage quality was reduced to below normal, owing to August rains. Crops pest problems were at a minimal level though the stinkbug and diamond back moth larvae caused some damage in two isolated areas of the region.

The soil conservation effort in the region was assisted by good accumulations of snow and by cold temperatures. Soil erosion by wind was not significant in the past year. Minor wind erosion was reported in early June; however, the severity was greatly reduced by the conservation tillage practices of an increasing number of farmers. The efforts of the district offices and the regional soil management committee in promoting good soil conservation were strengthened by component B of the Canada Alberta Research and Technology Transfer (CARTT) agreement. A proposed major conservation tillage project involving CARTT, the Alberta Conservation Tillage Society (ACTS) and regional staff furthered good soil conservation practices in the region.

Livestock producers and ranchers had a challenging year. Pasture shortages during the summer, combined with lower quality feed and a long cold winter, resulted in reduced production and scours problems for cow calf producers. Livestock feeders had slightly lower market prices which, when combined with high feeder prices and increased grain prices, resulted in reduced overall returns and significant payouts from the tripartite stabilization plan. The trend towards herd rebuilding continued – many producers increased their numbers. Feedlots also expanded their numbers and increased lot capacities, largely in anticipation of the increased opportunity and demand from the new Cargill Foods plant expected to begin operations in June 1989. Cargill and several other packers offered deferred delivery contracts to larger feedlots.

Hog producers had a year of belt tightening. Dramatically falling hog prices created financial difficulty for many producers. The tripartite stabilization plan was the lifeline for many producers. The number of hog operations remained constant, with increased numbers of hog sales coming from improved efficiency or increased herd sizes in existing operations.

Seven dairy producers left the industry while several new producers started operations. Inspite of this turnover and two major fire disasters, the region only had a net loss of three operations. Milk quality, production efficiency and overall management continued to improve throughout the region. The number of sheep producers has stabilized. The total number of sheep decreased slightly. Poultry production remained static, with only a slight increase in broiler production.

District offices had a significant role in delivering provincial and federal programs that were designed to reduce the costs of production or share the risk encountered by producers. The farm fertilizer price protection program, the Alberta crow benefit offset program and the Alberta farm fuel distribution allowance helped to reduce input costs for producers. In addition, uncertainty and risk for producers were addressed through such programs as the tripartite stabilization program, the Farm Credit Stability Program, the Special Canadian Grains Program and the various drought assistance and support measures. In total, district offices responded to 24,874 requests for information or assistance in providing these programs to eligible producers.

The spring and summer drought conditions of 1988 affected water supplies for livestock. During the year, 115 requests for Alberta's dugout water pumping program were received. In addition, 954 new dugouts and seven new stock watering dams were constructed. One hundred and ninety-two dugouts and three stock watering dams were involved in major reconstruction. In total, 1,156 water storage facilities were constructed or rehabilitated to provide for domestic and farm water supply.

There was continued strong interest in and support for the Farming for the Future on-farm demonstration program. Twenty-six new and 11 renewal projects were approved, including sheep covers to improve wool quality, maximum economic yield demonstrations on barley and improving efficiency of livestock feeders under heat stress. A total of $88,309 was committed to these projects, many of which were included in district and regional tours conducted for producers throughout the region.

The Savor Alberta Flavor program was carried out in the Airdrie, Hanna and Strathmore districts. The program was a co-operative effort between the home economics branch, the field services sector, the marketing sector and the Alberta Food Processors Association. District home economists also took the initiative to promote Alberta food and beverage products at numerous district events.

High interest rates throughout the year contributed to problems in maintaining positive net margins for many producers in the region. Those with little or no debt were able to continue their operations with minimal difficulty. An increased number of producers who faced financial difficulty sought financial consultation and advice. Consultations offered as part of the farm financial management initiatives program increased by 138 per cent over 1987. In total, 58 farm families received indepth consultation. Several other producers were directed to the Farm Debt Review Board.

District office staff, with assistance from consultants and instructors of the farm financial initiatives program, provided five major Gear Up Financially workshops to 51 farm families throughout the region. In total, district office staff provided 1,830 clients with 118 educational events directly related to farm financial management as well as follow-up as requested by the client. District office staff made 5,762 contacts in person, by telephone or letter in the area of financial and business management.

Throughout the region, farm families showed enthusiastic support for one-day conferences. Themes chosen were: Just for You, Farm Women, Decision With Vision and Building Better Working Relationships With Farm Family Members. Through enjoyable learning experiences, these programs reaffirmed to couples, that farming is a "family affair".

Interest in home based business as a means of supplementing farm income increased. Workshops on this topic featured district home economists, home economics specialists, local entrepreneurs and staff of Alberta Economic Development and Trade.

Overall, the areas of production technology, marketing strategy, farm and financial management and leadership development were emphasized in 529 extension and technology transfer programs conducted by district office staff. In total, more than 12,260 primary producers and processors were involved.

Explore Nutritious Alberta, an awareness program directed at elementary school children, was introduced to teachers of grades four to six. The program resource package supported the nutrition component of the elementary health curriculum and linked food, nutrition and agriculture. Two newsletters were prepared and distributed to teachers who participated in program workshops.

District agriculturists and district home economists continued to work closely with 40 agricultural societies in order to plan and implement community activities. Particular emphasis was given to agricultural fairs, trade shows, farm produce exhibits and promotion and leadership development.

District home economists continued efforts to recruit 4-H members and leaders. A growing interest in the Alberta 4-H program became evident. The current number of 4-H clubs in the region was 56. Total membership was 998 guided by 300 leaders. The trend towards multi-project clubs continued through the 1988 club year.

Department specialists and district agriculturists continued to provide direct input and support to the 12 municipal co-op seed cleaning plants located throughout the region. The volume of seed cleaned exceeded 5.6 million bushels, up considerably from 1987. Four of the 12 plants participated in Alberta Agriculture's upgrading program. The Three Hills plant continued to develop plans for a new facility in 1990-1991.

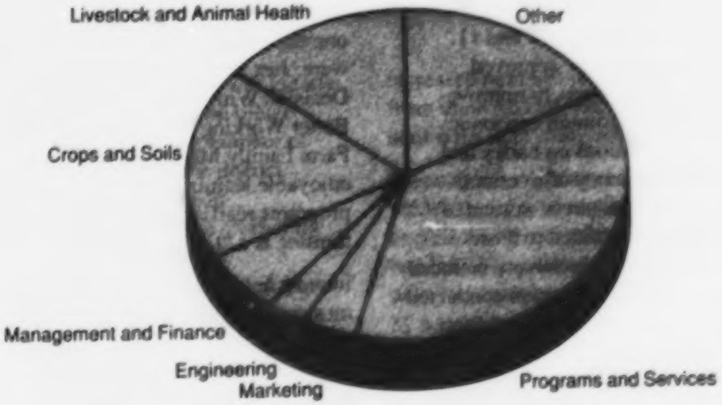
Agricultural service boards continued to provide services to the community targeted toward specific needs and situations. The newly-formed M.D. of Bighorn decided not to form a service board for a few years. However, they have entered into agreement with the M.D. of Rocky View for an addendum to the municipal agreement for agricultural service board support for weed control. Service boards in general maintained a strong program of controlling restricted weeds. Nodding thistle and diffuse and spotted knapweed were both kept in check. Soil conservation was also a focus of service boards. The four service boards in the eastern portion of the region have continued their soil conservation demonstration of conservation tillage and stubble management. Several other boards in the region are developing long-term integrated soil conservation programs for their municipalities.

Thirty-four certificates were awarded to trainees in the green certificate training program over the past year. The certificates that were awarded to recognize training were evenly divided between Level I and Level II. The addition of the new feedlot training project in January has met with strong interest, and the total number of trainees was expected to increase by up to 30 per cent. A recent survey showed that greater than 95 per cent of the trainees who received a level II certificate remained involved in their area of training.

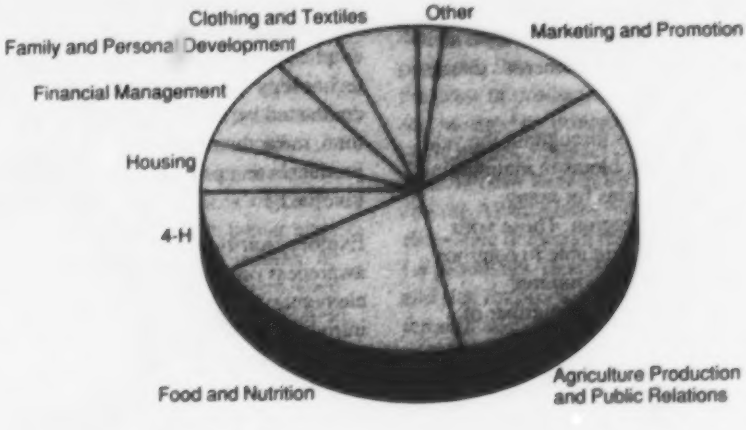
NUMBER OF CLIENT CONTACTS

Number of Client Contacts	36,270
Number of Phone Calls	38,035
Farm Visits	2,202
Number of Programs	529
Attendance at Programs	12,265

Region 2
Agricultural Client Contacts



Region 2
Home Economics Client Contacts



REGION 3

North Central Region
Red Deer

For most producers, 1988-89 will be remembered as the year of the drought. Snow cover was minimal and there was virtually no run-off. Conditions remained very dry until mid-June. The remainder of the summer saw below average rainfall in the eastern half of the region. Only the northwestern part of the region received adequate rainfall.

Cereal yields were average in the western portions of the region. The yields decreased towards the eastern portion of the province. Near the Saskatchewan border, producers salvaged what they could for cattle feed and combined nothing. Cereal quality was good. Markets improved greatly from the previous year. Barley sold for as much as $2.50 per bushel. Canola acreage remained high due to strong price projections. Many growers shortened rotations to the point where they were growing canola every second year. Oat acreage remained constant despite improving market opportunities. The limiting factor was the acreage suitable for oat production. Field pea acreage doubled to approximately 50,000 acres. The prices were generally over $5.00 per bushel, with the bulk of production being utilized locally in hog rations. Fertilizer use was down from the previous year.

Forage growth on pastures started slowly and did not regrow when grazed. Many cattlemen grazed hay land, leased additional pasture or sold animals. The first cut of hay was minimal. The second cut was normal. This, combined with cereal use as greenfeed and silage, provided generally adequate winter feed supplies.

Annual weed infestations were similar to those in previous years. Perennial weeds increased because of lack of crop competition. Canada thistle, toadflax, quackgrass, and scentless chamomile continued to be the major problems. Stork's-bill spread rapidly in canola fields.

Several agricultural service boards continued to co-operate on a major scentless chamomile program, which included posters, media campaigns, hay inspection, and spraying programs.

Insects did not pose a major problem in 1988-89. There were concerns over diamondback moths in the eastern portions of the region, but little spraying was done. Forest tent caterpillars continued to be a nuisance. Virulent blackleg of canola was positively identified in the brown soil zones. A major effort was put into producer and agricultural service board meetings to educate all concerned and to develop a control and monitoring program for this serious canola disease.

District home economists continued to co-operate with agricultural service boards and agribusiness in promoting the use of protective clothing and safety practices when applying pesticides.

Soil erosion by wind was a major problem. Some producers seeded fields up to three times. Many producers began to leave stubble in the field in the fall. This, combined with reduced tillage, reduced erosion. Producers were concerned about erosion and rapidly adopted these technologies in the brown soil zones. Several agricultural service boards began development of long-term conservation programs. The County of Flagstaff implemented a comprehensive five-year plan. Dugout construction and new well drilling were at record levels.

Calf weaning weights were normal and prices were only slightly lower than last year. The winter was the harshest in the last several years. Scours and calf death loss were major problems. The feedlot industry was in a negative margin situation through most of 1988-89. Profitability was very limited, because of high feeder and feed grain prices in combination with the cold winter. Feedlot owners sought custom cattle as a means of risk reduction. Feedlots tended to base many buy and sell decisions on projected payouts from the national tripartite red meat stabilization program.

Hog producers experienced major price declines. Tripartite payments kept many hog producers in business. Throughout the region, hog production remained fairly stable. Drug residue problems were of increasing concern to the hog industry. Several producers renovated or expanded their barns. Hog barn siting was a growing concern to the general public in the western half of the region.

The dairy industry remained stable, owing to higher hay and soymeal prices reduced profits. Considerable concern was expressed by dairy producers over the possible impact of the free trade negotiations. Conversely, they made little comment on the multi-lateral trade negotiations. There was a continuing influx of European immigrants starting dairy farms. More dairies switched their feeding systems to silage. Interest was increased in calf and replacement heifer facilities.

1988-89 saw an easing of the financial difficulties being experienced by central Alberta farms. Tripartite stabilizations payments and higher commodity prices were largely responsible. Lenders indicated that foreclosures and quit claims were virtually at a standstill. In fact, most repossessed properties were resold as land prices marginally increased. Lenders estimated that up to five per cent of their accounts were still very sensitive to financial stress. Farm Debt Review Board activity was markedly down from last year. Tax reform was a prime concern for many farm businesses. There was a significant increase in the number of farm corporations formed. Key reasons for this were intergenerational transfer of the business and long-term tax management. Operating credit became more difficult to obtain from lenders.

Agricultural service industries and equipment dealers experienced a turnaround in that they saw increased sales and reduced deliquent accounts. Fertilizer dealers reported slightly reduced spring sales but increased fall sales. Feed mills remained stable, and a new mill opened in Red Deer. Veterinarians had increased business owing to the colder winter and increased disease problems. Seed plants had a total volume of over 5.8 million bushels, up 20 per cent from last year. Many seed plants took advantage of the upgrading program to improve their facilites.

Agricultural processing industries continued to show stability. An exception to this was the lock-out at Fletcher's. Feedlots looked forward, with anticipation, to the opening of the Cargill packing plant and its associated contracting opportunities.

The number of people seeking crisis financial counselling decreased. However, there was an increase in the number of those seeking financial advice for long-term planning and growth. There was also an increase in demand for financial advice from those producers expanding their businesses and from those doing long-term planning.

The region continued to target programming towards agricultural business unit development, infrastructure development, and agricultural resource conservation. Specific focus was placed on increasing long-term profitability of primary producers and agricultural processors, fostering self-reliant industry organizations and promoting responsible management of Alberta's soil and water resources.

Individual financial counselling sessions were provided to 5,364 producers by district staff and consultants employed under the farm financial management initiatives program. Financial management continued to be a priority for the region; 158 short courses were offered and attended by 2,665 people. These efforts were supplemented by five in-depth financial management courses for 87 families, and Understanding Profit homestudy for 142 participants. These activities represented an increase in consulting and a decrease in the number of courses from the previous year.

There was heavy demand continued for district offices to administer various support programs. The region handled approximately 26 per cent of the provincial demand.

A wide range of farm business management information was provided at educational events; the information focused on agricultural production and home economics, finance, marketing and human resource management. There was a high demand for information on finance, marketing, crop and beef production and human nutrition.

Regional seminars included the Gear Up Financially courses, understanding profit home study course, grain and beef marketing, beef herd management, dairy management, swine management, farm records and conservation. Lenders' seminars were conducted on beef production and grain marketing. Lenders continued to be involved in helping with financial management programming. Regional specialists participated in 39 agri-business-organized producer meetings. Approximately 63 per cent of our producer meetings had agri-business or farm organization participation.

In co-operation with the accounting industry, all district home economists continued to make a major commitment to the program of farm records; over 300 farms were involved. Emphasis was placed on promoting Alberta food products. The Savor Alberta Flavor program was conducted in three districts. Other promotional activities, such as in-store demos, media, and educational efforts, were held in most districts.

Publications developed in 1988-89 included newsletters, joint publications with agricultural service boards and forage associations, numerous media articles, several production cost budgets used in financial consulting with farm businesses and banks, articles published in national magazines, and contributions to several Alberta Agriculture factsheets and publications. Six thousand cow-calf producers were surveyed on their production management. Individual analysis was provided to each of the 3,200 respondents. Major effort went into the development and delivery of CattleSim, a computer assisted cattle marketing educational program. Computer software was developed and used extensively to assist in counselling farm businesses on a wide range of management practices. District home economists, district agriculturists, and specialists continued to use local newspapers, radio and television in their educational programming. In 1988-89, 1,360 newscolumns were published, and 187 radio broadcasts and 50 television presentations were aired.

District and regional staff members continued to be heavily involved in field applied research projects. Work with agricultural service boards, forage associations, commodity organizations and applied research associations expanded. The district agriculturist in the eastern portion of the region helped the Battle River Applied Research Association become fully operational. More than 100 applied research projects were conducted, with help from the above-mentioned agencies and the Farming for the Future on-farm demonstration program.

The upgrading of intensive livestock facilities continued. New construction and renovations of hog and dairy barns resulted in numerous requests to the region's engineering staff. Demand also increased for advice on livestock and grain handling facilities. Continued efforts were made in the areas of building trouble-shooting, livestock environment, water supply systems, grain drying/handling systems, and tillage equipment.

District agriculturists continued to provide input into subdivision requests and siting of intensive livestock facilities. District staff members attended 873 meetings on this topic as a result of their involvement with agricultural service boards, community groups, producer organizations, agricultural development committees, seed plants and agri-businesses. Ten agricultural service boards were active in the region.

The green certificate program involved approximately 60 farm trainers and more than 80 trainees. Staff provided numerous consultations on farm labor in addition to the green certificate training program.

There were 117 4-H clubs (1,950 members), fourteen 4-H district councils, and two 4-H regional councils active. Efforts focused on leadership development of 4-H leaders and on assisting them in developing programs for their members. District home economists were also active in supporting the individual clubs.

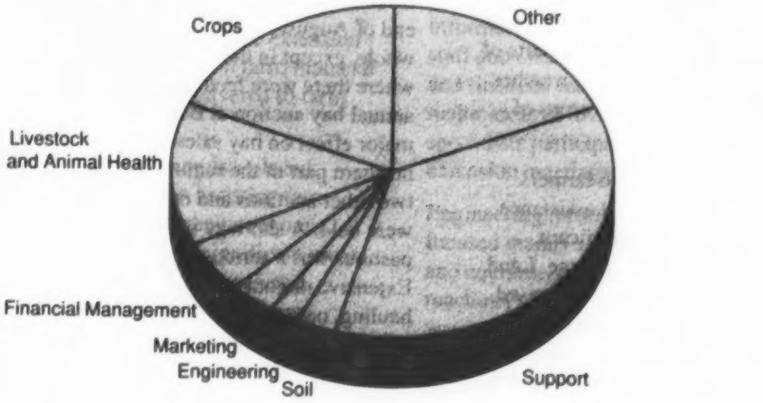
The region, with its central location, continued to offer excellent opportunities for agricultural shows and conferences. District and regional staff were called upon to help organize and participated in large provincial events such as Agri-Trade, the Grow Show, the Pork Congress, the Bull Congress and numerous farm organization conferences.

The continued need of farmers to improve their profitability, the uncertainty of longer-term market forces and unfavorable weather continued to challenge staff in providing in-depth and practical management information to an increasingly sophisticated farm business clientele. Farm family interest in marketing, financial management, long-term planning, risk management, seeking ways to improve farm profits and supplementing farm income provided challenging opportunities on how to plan programming.

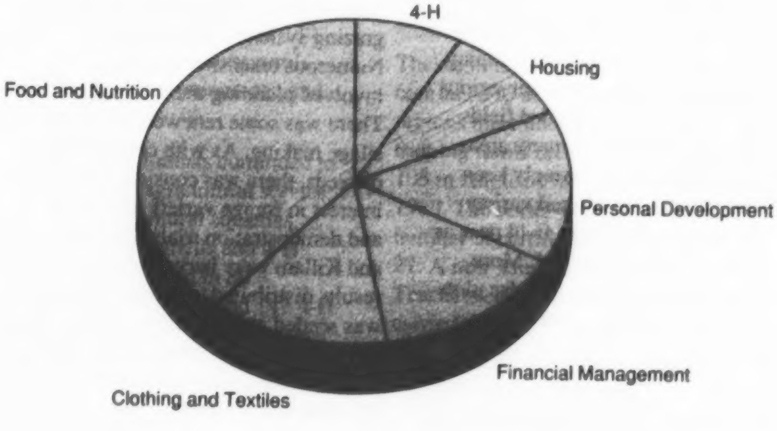
NUMBER OF CLIENT CONTACTS

Office Interviews	39,308
Telephone Calls	48,402
Farm Visits	3,286
Educational Programs	712
Attendance at Programs	19,249

Region 3
Agricultural Client Contacts



Region 3
Home Economics Client Contacts



REGION 4

Northeast Region Vermilion

The spring of 1988 was extremely dry throughout the region. Below normal spring runoff left many dugouts and waterholes unfilled, necessitating both dugout pumping and water hauling. Lack of rainfall in May and June led to short pastures, and a high demand for extra hay and rented pasture. Annual crop germination was uneven and first cut hay yields were below normal. Rains began in late June and continued throughout July in eastern and western districts, but it remained dry in the central part of the region. Rains were spotty and yields varied in all parts of the region, but good harvest weather allowed farmers to obtain crops of good quality.

Government payments to farmers through various financial assistance programs made up a significant percentage of net farm income. Land prices stabilized and sales increased greatly during the year. Many farms continued to experience serious financial problems, mainly related to high debts. Beef producers were in an improved financial situation at the end of the year, but pork producers experienced a difficult year.

Although crop prices recovered to a large extent, there was still a 10 per cent increase in summerfallow acreage. Continuous/minimum tillage cropping practices were reinforced when serious wind erosion on newly-seeded fields necessitated reseeding in many areas. Producers showed increasingly keen interest in cereal and oilseed variety test plot results. Interest in field peas as an alternative crop increased. More demonstration and research pulse plots were grown.

A light outbreak of diamondback moth larvae occurred in the M.D.s of Provost and Wainwright and the County of Vermilion River and required some spraying. Virulent blackleg in canola was of increasing concern in the eastern half of the region.

Hay and pasture suffered severe drought stress in May and June. First cut hay yields were below normal and heavy rains caused significant damage in some western districts. Rains in July and August in the eastern and western districts produced excellent second cut hay yields and improved pastures. This resulted in good hay supplies by the end of August for the region as a whole, except in the central area, where there were feed shortages. The annual hay auction at Bonnyville had a major effect on hay sales in the northern part of the region. This year two other auctions and one hay sale were held. A shortage of water on pastures was a serious problem. Extensive dugout pumping, water hauling, new dugout construction and rehabilitation of old dugouts addressed this problem.

Forage seed prices remained high and, with spring drought conditions, forage seeding was delayed or curtailed. By March of 1989, seed prices had dropped significantly.

Interest remained high in intensive grazing systems in the region. Numerous extension activities involved planning these systems. There was some renewed interest in silage making. As with cereals and oilseeds, there was considerable interest in forage variety adaptation and demonstration trials. Plots at Bellis and Killam were harvested and the results distributed. An additional plot was seeded at Vermilion and a sainfoin selection trial was planted at Fort Kent in conjunction with the Alberta Environmental Centre.

Market prospects and initial prices played a major role in farmers' cropping decisions. For the second year in a row, wheat and barley acreage decreased while canola and summerfallow acreage increased. Oat acres increased to meet demand from the pony oat acreage market. Field pea acreage doubled in 1988, in response to good prices relative to cereal and oilseed crops and market opportunities.

Soil conservation became a visible concern of producers during the year. Early spring wind erosion on seeded fields and severe water erosion in parts of the region in early summer highlighted the problem to many farmers. Concern about soil salinity increased.

An extension campaign was undertaken in the area of soil conservation, tillage and management in the Counties of Beaver and St. Paul and the M.D. of Wainwright during the winter months. Farmers showed concern about the dry conditions and the need for soil and moisture conservation. A demonstration of conservation fallowing using a wide blade cultivator and herbicides was conducted in the M.D.s of Wainwright and Provost and the Counties of Vermilion River and Two Hills. Farmers expressed interest regarding the deep ripping of soils, with the major concern about which soils should be ripped.

Livestock producers had a mixed year. Hog producers experienced market prices that dipped below $50/cwt. at times. Higher feed costs further diminished producer returns. The national tripartite stabilization plan softened the blow, but pig numbers nevertheless decreased five to 10 per cent in spite of this. Weaner operations suffered the most with some operations going out of business. Some operators used this cycle as an opportunity to depopulate and then repopulate with disease-free stock. Low returns have increased interest in outdoor housing, self feeders, nutritional changes and improved management practices as ways to reduce costs and improve efficiency. Computerized record keeping generated a good deal of interest among hog producers.

The beef herd buildup continued in 1988-89. Excellent calf and feeder prices resulted in very small and sometimes negative feeding margins. Some producers explored hedging, options and cash contracts to set prices.

Beef herd management, nutrition and economics were major areas of interest to producers. A new beef production club was started at St. Paul. Beef surveys were conducted in the St. Paul, Bonnyville, Two Hills, Vermilion, Lloydminster, Wainwright and Provost districts. The results of these surveys provided valuable information for beef extension programming in the region.

Dairy production remained fairly stable, with a net decline of three producers. Nearly 60 per cent of dairy producers in the region were enrolled in a milk recording program. Milk quality improved, largely because of to the introduction of the somatic cell count to the grade and price program. Milk quota prices declined over the year. Interest remained strong in entering the dairy business. The four-litre plastic jug was a major issue in the region. The financial position of dairy producers in the region remained strong.

District staff activities focused on client concerns with financial security, maximizing economic production, financial management and food and nutrition. Administration of financial assistance programs occupied a substantial, but reduced, portion of total staff time. The majority of program work was handled by district office secretaries.

District agriculturists focused their attention on areas that directly affected the long-term viability of producers in their districts. The number of client contacts was 6.9 per cent lower than the previous year, but significantly more time was spent in the areas of commercial crops and livestock production. The number of extension meetings and courses increased 11 per cent. One priority area where both client contact and programming were increased was in the area of land, soil and water management.

The financial aspects of farm decision making were a major focus for all district agriculturists. Increased emphasis was placed on helping clients understand the financial implications of their production and management decisions. Contacts in this area declined somewhat as markets and prices improved. Sixty-five extension meetings and courses on farm financial management were delivered to farm clients.

District home economists placed special emphasis on assisting farm families to achieve their economic objectives. The most significant areas of client contact were foods and nutrition, financial management, clothing and textiles, and family and personal development training. Work by district home economists with clients in the area of financial management resulted in 2,519 individual client contacts. Seventy-three extension meetings and courses were delivered in this area. Record keeping and insurance assessments were completed for 140 farm families, and numerous rural lending institutions, accountants, and bookkeepers.

District home economists continued to work closely with agricultural service boards, local agricultural societies, further education councils and 4-H clubs. They participated in 80 agricultural service board and 147 4-H meetings, a significant increase over the previous year.

Other highlights included an emphasis on introducing the Explore Nutritious Alberta program to all schools, a special nutrition day in the Lakeland region, and other activities that promoted the healthfulness and safety of Alberta food products.

The farm financial management initiatives program was again delivered to farm families in the northeast region. Three Gear Up Financially courses and two follow-up courses were held. Nine record keeping and one Computer on Wheels record keeping courses were held with the support of both district agriculturists and district home economists. In-depth financial consulting services were provided to 35 families.

Regional specialists were heavily involved in providing detailed information and services to district staff and clients. Production, marketing and financial management were the major areas of involvement. Regional specialists participated in over 400 extension meetings and courses.

Engineering information and services focused mainly on livestock facilities and equipment, cropping and machinery management, and farm water supplies. The serious water shortage problems in the spring and summer of 1988 required a lot of engineering staff time. Under the dugout pumping program, 235 contracts were serviced compared to 35 to 50 in a normal year. The water hauling program received 236 applications and 1,860 dugouts were constructed and or rehabilitated.

The regional farm training specialist continued to be responsible for both regions three and four. The number of training farms dropped from a high of 105 in August 1988, to 82 in March 1989. The northeast region's highest number of certificates achieved was 27. A new Training of Farmer Teachers course was successfully carried out. The number of Level III's doubled from six to 12 in the two regions.

4-H activity in the region remained relatively constant. Membership in beef clubs declined slightly while membership in multi clubs increased. There seems to be a trend to smaller projects that take approximately one project meeting to complete. Beef, light horse, crafts, and clothing were the most popular project areas.

Interest in the Farming for the Future on-farm demonstration program remained strong during the year. Twenty new projects and seven renewals were recommended for approval by the regional review committee. Total funding for these projects exceeded $110,000. The level of producer group and club participation remained high.

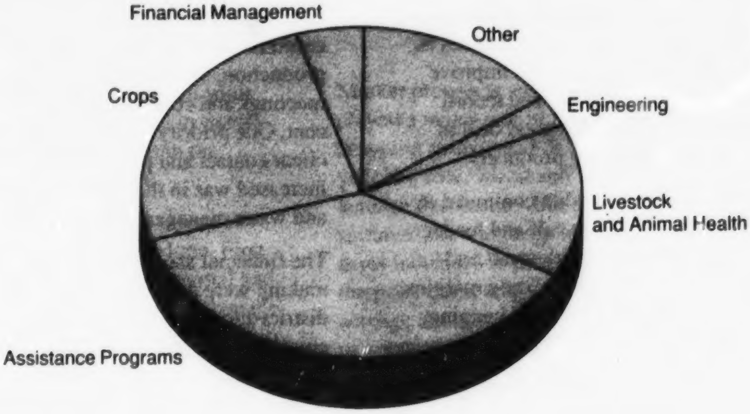
District staff represented Alberta Agriculture at over 800 advisory and board meetings during 1988-89. The major groups involved were agricultural service boards, seed cleaning plant boards, 4-H councils and clubs, further education councils and agricultural societies.

A close co-operative working relationship was maintained with agri-businesses across the region. District agriculturists worked closely with farm input suppliers, veterinarians and agricultural chemical companies. District home economists assisted food processors and retailers with product promotions. A similarly close relationship existed with producer groups and associations, especially with forage associations and producer clubs.

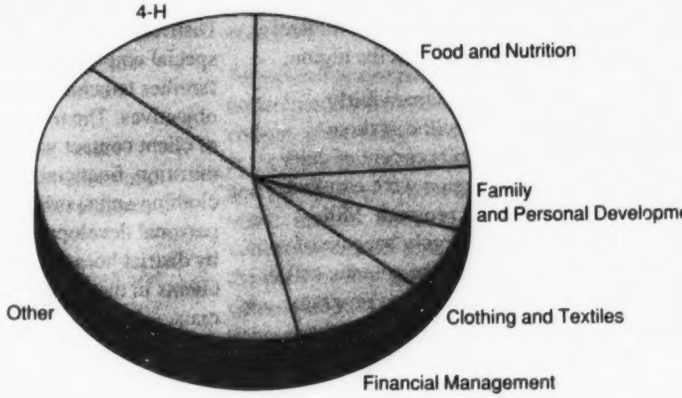
NUMBER OF CLIENT CONTACTS

Office Interviews	46,020
Telephone Calls	43,855
Farm Visits	3,152
Educational Programs	923
Attendance at Programs	18,981

Region 4
Agricultural Client Contacts



Region 4
Home Economics Client Contacts



REGION 5

Northwest Region Barrhead

Soil moisture levels were very low during the spring of 1988. There was only light precipitation the previous fall, little snow over the winter and virtually no rain until the end of May. Once rains started, however, they came regularly and in adequate amounts throughout most of the region. During the growing season, about 16 inches of rain were received, which enabled annual crops to fill, allowed for a good second cut of forages and provided adequate moisture for pastures. The lack of runoff in the early spring, however, resulted in a number of near-empty dugouts.

Annual crop yields throughout most of the region ranged from 95 to 105 per cent of the previous five-year average. Good harvesting conditions resulted in excellent crop quality and there was a large increase in sales of malt barley and specialty oats. Grades of hard red spring wheat were also higher, with 35 per cent and 50 per cent grading #2 and #3, respectively. Over 80 per cent of the canola crops in the region graded #1.

First-cut forage crops were slightly below average in yield, but the second cut was heavy and of good quality. The two crops combined resulted in an above average total and a large regional surplus. Excess hay was sold to the southern areas of the province and a new export market for double-compressed, small square bales was established. Leasing cows from southern Alberta for summer pasturing and winter feeding was another means commonly used to market surplus fodder. Despite the cold conditions of January, February and March 1989, a good inventory of hay remained. Forage seed yields were below average as the dry, early spring affected grass seed production, and a wetter July and August affected legume pollination.

The most profitable special crop in 1988 was field peas, used as a rotation crop in the black and gray-wooded soil zones. Approximately 30,000 acres of field peas were grown, with average yields in the 50 bushels per acre range. Pea prices continued to rise until late in 1988. Some producers sold all their production at over $6 per bushel to the feed pea export market.

The most significant feature of the 1988 growing season was the dramatic increase in grain prices. This resulted from widespread drought in the major crop producing regions of the United States and the southern portion of the Canadian prairies. Canadian Wheat Board initial prices for barley increased to $2.23 per bushel, up from $1 per bushel in 1987 (Barrhead). A similar near doubling of prices for oats and wheat resulted in a much improved profit picture for grain producers.

Cow-calf returns were generally profitable throughout the year but feedlot returns were marginal. A shortage of calves, a higher Canadian dollar and an increase in grain prices reduced feedlot profits. The average price of calves was $1.10 per pound, resulting in breakeven finished prices in the mid to high 80's.

Hog farmers experienced a negative return over cash costs for part of the year, owing to higher feed costs throughout the year and a decline in market prices during the second half of 1988. Production levels continued to be high in the region.

The dairy industry continued to be one of the most stable sectors of the regional agricultural economy. There was a normal turnover of dairy farms, with overall numbers declining slightly. The influx of replacement dairy farmers consisted mainly of dairymen from Holland.

Profits on most properly managed dairy farms remained good throughout 1988.

In a general sense, debt servicing problems declined during the 1988-89 production year. Stronger prices helped to improve profitability for those involved solely in grain production, and most operations negatively affected by higher grain prices were protected by the tripartite stabilization program. A number of other federal and provincial support and input cost reduction programs served to stabilize the entire industry. The number of cases dealt with by the Farm Debt Review Board declined, indicating that lenders issued foreclosure notices at a reduced rate.

Numerous consultations with individual farm families were made regarding financial management, credit and marketing. In total, 12,375 contacts were made by district staff in these areas. Economic implications continued to be stressed in all extension activities.

Regional cost of production data was collected for the first and third year, respectively for beef production and crop production on Gray Wooded and Black soils. Studies were also completed on pasture cost and on silage production. A number of other production cost bulletins were updated. The information gained from these projects assisted producers and staff to make more accurate management assessments.

Owing to the high interest in field pea production in the region, a field pea production manual was completed in co-operation with other department staff. Three thousand copies were printed and distributed. In addition, a pasture record pocket book was developed for field evaluation during the 1989 pasture season.

The farm financial management initiatives program continued into its fifth year. The financial counselling component of the program resulted in a further three major consultations being done by hired consultants. These consultants augmented the efforts of district and regional staff, who completed 117 detailed financial evaluations with producers. A second component of the program, the Gear Up Financially courses, was successfully continued for the fourth year. Four courses were offered throughout the region to a total of 35 farm families.

District staff attended 1,337 meetings and special events involving agricultural fairs, seed cleaning plants, rural crime watch groups, agricultural development committees, further education councils, various commodity and producer groups, 4-H events and agricultural service boards. A total of 1,011 news columns were written and 143 radio broadcasts delivered.

Staff undertook a major planning exercise in 1988 and developed a regional strategic management plan. This plan, which identified key priority areas in each of the agricultural disciplines of significance to the region, will provide program direction for the next five years. Specific goals were established and target groups identified. Input from line divisions and representatives of various producer and commodity groups was incorporated.

Regional programs included three major seminars jointly sponsored with the Western Barley Growers Association and the Alberta Canola Growers Association. These sessions concentrated on transportation issues, varietal updates and various marketing alternatives for barley and canola.

Other regional programs included two pasture management seminars jointly sponsored with the Pembina and West Central Forage Associations. In addition, two workshops were organized for regional bookkeepers and accountants. A series on beef cattle marketing was regionally co-ordinated with the Alberta Cattle Commission.

A program entitled "Somatic Cells Earn More With Less" was jointly sponsored with the dairy division. Several regional and district staff were also heavily involved in planning, organizing and promoting the Alberta Beef Symposium, held in conjunction with the beef cattle and sheep branch and the Alberta Cattle Commission. In addition, a regional program on swine management and health was developed with the Alberta Swine Breeders' Association, and a training session on pesticide use was designed for regional dealers and agribusinesses.

The regional livestock newsletter entitled *Beef 'n' Bacon* was continued for its fourth year. Eight monthly issues were distributed from October to May to 2,000 regional livestock producers. This project was designed to provide up-to-date information on nutritional and management matters and continued to be extremely popular.

Several 4-H workshops were conducted for both members and leaders to develop program planning, leadership, and public speaking skills, and the regional 4-H homemaking competition was held for the second time. Nine farm women's conferences were held emphasizing family and personal development, financial management, nutritional concerns and legal issues.

The regional home economics newsletter continued to be produced, with three issues being distributed to 6,100 farm families. These issues focused on matters pertaining to stress, nutrition, Alberta food products, and time and financial management.

Explore Nutritious Alberta continued as a major provincial nutrition education program for schools and the new program package for grades four to six was well received.

Several district and regional staff members continued to be heavily involved in demonstrations and field applied research projects. Work with agricultural service boards, forage associations, and other producer groups in this regard was further expanded in 1988. The Farming for the Future on-farm demonstration program continued to be extremely popular, with 21 new and second-year projects being approved for funding. The majority of projects were related to pasture management, special crops and forage production.

In the engineering field, most requests continued to be for information on adding to existing facilities and improving already established operations. There continued to be an overall low-cost approach to requests for information on farm structures, materials handling and machinery selection.

Because of widespread water shortages in the spring and early summer, dugout pumping was seven times the normal rate in 1988, resulting in 37 farm dugouts being filled within the region. The continuation of federal and provincial dugout funding programs resulted in a tremendous increase in dugout construction. Construction activity exceeded the yearly average of 75 dugouts by 15 times, for a total of 1,269 dugouts. Approximately 75 per cent of these were pasture dugouts and 25 per cent farmstead dugouts. Farmers continued to construct larger dugouts, averaging about 3,500 cubic metres, almost twice the size of the minimum requirement for government funding.

Provincial funding programs for water wells also resulted in a large increase in construction. Well construction numbers exceeded the yearly average of 350 by nearly 3.5 times, for a total of 1,182 wells. Approximately 80 per cent of these were small-diameter, drilled wells and 20 per cent were large-diameter, bored wells. In all, these water supply programs greatly enhanced the "drought proofing" of the region.

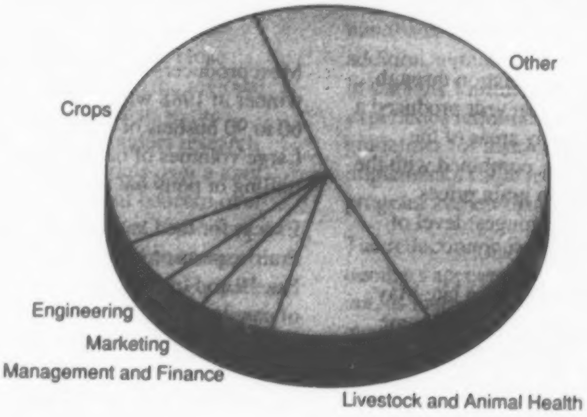
The green certificate farm training program continued to train at three levels: a first level for farm employees, a second level for foremen and a third level for farm managers. In total, 25 Level I and nine Level II certificates were awarded, primarily in the dairy and swine sectors. Although these figures are down from the previous year, the percentage of trainees leaving with certificates has increased from 56 per cent to 62 per cent.

The number of 4-H clubs in the region decreased slightly to 85. Total membership was 1,315, guided by 469 leaders. The most popular projects continued to be beef, followed by light horse, foods, crafts and clothing. Promotion of 4-H through media events continued to be emphasized by clubs and district councils.

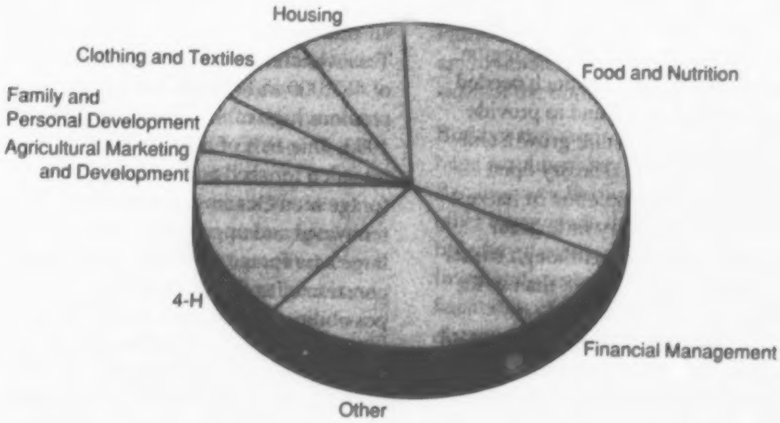
NUMBER OF CLIENT CONTACTS

Interviews	42,877
Telephone Calls	37,383
Farm Visits	4,627
Letters	3,246
Educational Programs	735
Attendance at Programs	18,775

Region 5
Agricultural Client Contacts



Region 5
Home Economics Client Contacts



REGION 6

Peace Region
Fairview

Above average precipitation through much of the 1988 crop year produced a bumper crop in many areas of the Peace Region. This, combined with the dramatic increase in grain prices, contributed to the strongest level of rural optimism since 1980.

Excessively high rainfall in late May and in June (up to 19 inches in some locations) caused dugout pollution and siltation, some flooding and prevented seeding on some fields. Disaster registration was announced in the Kinuso area where many thousands of acres of hay and crop land were devastated and approximately 200 cattle killed by severe flooding of the rivers and streams feeding into Slave Lake. The net effect across the region, however, was to replace much needed soil moisture reserves and to provide excellent hay and pasture growth and bumper grain yields. The dry open autumn allowed completion of harvest by early October. Very little grain drying was necessary. Although winter came much earlier in 1988 than in the previous year, the early harvest allowed completion of engineered field drainage ditches and livestock handling facilities in many locations.

For the ninth consecutive year, wheat acreage remained high. Many farmers produced their best crop ever with average yields of 35 to 45 bushels per acre. Barley acreages were reduced by 46 per cent from 1987. Fallow acres increased by 16 per cent, but this may be attributed mostly to excessive rain during the latter half of May and the first half of June when several weeks of seeding time were lost. Of major significance was the volume of high quality malt barley harvested and marketed.

Most producers regarded oats as a real winner in 1988 with yields averaging 60 to 90 bushels of excellent quality. Large volumes of oats were sold into milling or pony oat markets.

Except for the County of Grande Prairie, parts of Improvement District No. 19 and other smaller areas, yields of canola were disappointing. High rainfall from mid-May to early July caused drowning out on significant acreages and very high levels of root rot at critical growth stages of canola. Yields in the excessive rainfall areas were down dramatically from the previous year.

Forage crop acreage reached an all-time high of 930,000 acres in 1988. This was considerably above the low of 487,000 in 1978 and well above the previous high of 830,000 acres in 1973. One-half of this acreage was intended for seed production. Two forage seed cleaning plants were renovated and upgraded in 1988. A large new forage cleaning facility was constructed at Sexsmith. The possibility of establishing other forage cleaning facilities was examined in several districts. Four alfalfa dehydrating plants continued operation through 1988.

Creeping red fescue yields were up at 300 to 600 pounds per acre. Brome grass yields were variable but generally down.

Strong interest in field pea production continued in 1988. The field pea acreage grown in 1988 tripled over the previous year, to a total of 35,000 acres.

Interest in saskatoon production continued to expand, with many new plots planted in 1988. The Fruit Growers Co-operative at Hythe formed a research group which had a number of on-farm demonstration projects underway. The plant operated a nitrogen quick-freeze unit capable of packaging fresh or frozen berries. A local winery continued to use substantial amounts of the saskatoon harvest for its increasingly popular saskatoon wine.

Fertilizer purchases increased substantially in the region. Anticipation of strong yields based on moisture conditions plus high commodity prices contributed greatly to increased interest in fertilizer usage. Poor commodity prices in the past encouraged more banding of anhydrous ammonia and a dramatic increase in soil sampling so that the most economical choice of fertilizer inputs was made. The closing of Dawson Creek's lime plant meant farmers who were interested in liming the region's large acreages of acidic soils, had to haul lime from Exshaw. The distances involved discouraged additional liming activity.

Interest in soil conservation showed a dramatic upturn during the 1988-89 year. Implementation of the Canada/Alberta Agreement on Research and Technology Transfer (CARTT) with the addition of a regional co-ordinator, greatly enhanced conservation programming. Additional interest from farmers and farm organizations was evidenced in a 250 per cent growth in enquiries, short courses and seminars in the conservation subject area. Two major on-farm demonstration conservation projects were carried out at Bay Tree and Falher, and a major CARTT research project was implemented at Rycroft. Producer zero and minimum till associations at both Spirit River and

Nampa also began major collective projects which culminated in well attended field days.

The 13 agricultural service boards in the region continued their major regional focus on weed control. Service boards completed a major questionnaire on weed enforcement issues and policies which contributed to broader regional understanding of both technical and enforcement issues of weed control. The regional effort encouraged use of extension as opposed to enforcement, as the first line of attack in weed control work. This effort also contributed greatly to bringing all boards in the region up to a minimum standard in terms of weed control guidelines. Staff were heavily involved in training weed inspectors and in ongoing advisory and demonstration work with service boards.

Blackleg in canola continued to cause serious concern among canola producers in the region who remained free of the disease through the 1988 crop year. A major co-operative effort between the crop protection branch staff, the Alberta Canola Growers Association, and Agriculture Canada's plant products division cumulated in a provincial virulent blackleg of canola control program. Extension staff also participated in a major blackleg awareness campaign. The program included information on disease symptoms, potential losses, economic consequences and recommended measures to prevent introduction of the disease into the region. Testing of seed sources from the Peace to date produced no evidence of virulent blackleg.

Insect pests were not regarded as serious in the field crops during the year. Research, however, was carried out over the year to determine the impact of major insect problems such as barley thrip, flea beetle in canola, cutworms, silver top in brome grass, and the rapid movement of the Russian wheat aphid into Canada. With 1.5 million acres of wheat and 800,000 acres of barley in the Peace in 1989, producers expressed growing concern about the spread of this insect.

Development work continued on the 32-acre regional research farm site donated by the County of Fairview. A plot plan was developed, with a substantial increase in research conducted on the site. The close proximity of the land to the regional office allowed specialists in the soils-crops area to conduct research and demonstration trials over a long period of time without concern over land tenure. Staff travel costs were reduced because the farm site was close to the regional office. Permanent survey and historical plot inventories were put into place. The farm site was included in several tours over the previous year. The first annual report of research results was distributed in May of 1989.

While the Peace has traditionally not been a major producer of livestock, there was increased interest and expansion in livestock production in 1988, evidenced by record attendance at calving clinics in the region. Statistics indicated beef cattle numbers were up by a larger per centage in the Peace Region over 1981 than anywhere else in Alberta. Continued strong calf prices have encouraged cow-calf expansions. Many producers who formerly ran small beef herds and worked off-farm in the winter made the decision this year to expand to full time operations in order to stay on the farm over winter. A major part of beef extension work was devoted to designing corral layouts for farmers and ranchers who lack these facilities. More than 100 of these facilities have been designed for interested cattlemen over the past three years.

The Fairview College Bull Test Station, the only bull test station in the Peace Region, completed its second year of operation. Entries to the station increased from 109 in 1987 to 170 in 1988. The year concluded with a successful sale of 66 performance tested bulls for an average price of approximately $1,800. Fall cattle sales were held directly off pastures at Bear Canyon and High Prairie.

A major extension program aimed at shortening the calving season resulted in the production of a cattle improvement program calving handbook and herd record book. In addition, a pilot project with four herds in the Fort Vermilion area provided the experience required to complete guidelines for district agriculturists to implement a cattle improvement program in their districts.

The reduction in breeding ewe numbers appeared to have bottomed out, as there was a modest increase over the past year. The Peace River Lamb Association (PRLA) continued to provide a non-profit lamb and wool marketing service to British Columbia and Alberta sheepmen. More than 3,000 lambs were marketed via this organization in 1988. An annual seminar jointly sponsored by PRLA and Alberta Agriculture was held in Fairview. It was attended by approximately 80 producers from both sides of the border.

Bumper hay crops during 1988 led to a huge surplus of hay in the region. Because supplies were good in many other locations in the province, very little hay moved out of the region. Investigations by staff into the feasibility of shipping hay long distances by rail indicated that, while rail freight rates were cheaper than truck rates, the increased handling costs and special rail freight rules made the shipping of hay by rail unattractive to producers.

Pasture availability on the 10 provincial grazing reserves, on the many private grazing leases, and on deeded land is sufficient to graze many more livestock than are currently raised in the Peace. Substantial numbers of cattle from central and southern Alberta are currently being grazed on the provincial grazing reserves. A request from a group of Fairview area producers to build a new community pasture in the district was turned down by Alberta Forestry, Lands and Wildlife.

Alberta Agriculture continued to provide office space and secretarial support to the North Peace Forage Association, South Peace Forage Association and Valleyview and Districts Forage Association. In addition, office space and secretarial support were supplied to the Smoky Applied Research and Demonstration Association at Falher. In January 1988, the Improvement District 22 Applied Research and Demonstration Association was formed at Manning, with support from area producers. Alberta Agriculture supplied office space and secretarial support for the organization's permanent manager-researcher.

Beef producer committees helped design and resource the program for Peace Country Beef Cattle Days held simultaneously at Fairview and Valleyview. The program attracted more than 150 producers. The total beef concept continued to grow in the region, with producer groups at Debolt, Valleyview and La Crete. Generally, beef extension activities remained in strong demand, in response to continuing strong cattle prices and a movement to more permanency in the industry.

Hog prices dropped severely in the second half of 1988 and continued at low levels into 1989. The combination of low prices and high feed costs, caused a negative return for most producers in the region. While some herds have outstanding production levels, the small size of herds in the Peace – 12 per cent of provincial producers running only 2.5 per cent total sows – has maintained a demand for much extension work.

The continuing closure of the Canadian border to importation of packaged bees and queens from the United States had a major impact on the Peace region honey industry. Many more producers overwintered hives in 1988-89. This, combined with record honey yields over the 1988 year, produced some optimism in the industry. However, continuing low honey prices and the discovery of the tracheal mite at several locations in the region once again caused concern among producers.

The Gear Up Financially course completed its fourth and final year in the region. Approximately 40 individuals took part in the four courses taught at different locations across the Peace. Satisfaction was high and almost all participants indicated they would strongly recommend this intensive course to their neighbours. Surveys by several staff members, however, indicated that because of the very large amount of day-time, off-farm employment in the region, more clientele would benefit from shorter courses than Gear Up.

As a result of a high number of strong referrals from staff, the financial consulting program was heavily used. By the end of the year, between two and a half and three per cent of farmers in the region had received individual, in-depth consulting through this program. The renewal of the program was greeted with enthusiasm by producers.

Interest in record keeping and accounting courses remained high. A record number of attendees came to the approximately 25 record keeping courses offered. Under the guidance of the regional economist, district home economists taught many of these courses.

Farmers continued to request assistance from the regional farm economist on setting up computerized accounting systems. Problems ranged from configuring program discs to setting up a chart of accounts. Enquiries regarding the economics of small fruit production were also up over the previous year, reflecting the increased interest in saskatoon and small fruit production. Short courses, seminars, and individual consultations in the area of estate planning and farm taxation continued at very high levels of interest. District office staff collaborated with Fairview College in hosting eight "Computers on Wheels" courses.

Extension provided their assistance in the marketing area to introduce the concept of hedging to grain producers. "An Introduction to Hedging" was offered at seven locations and a computerized hedging game called FutureSim was played by producers at five locations in the Peace. The regional marketing economist also worked towards completion of FutureSim II – a more advanced version of Future Sim. An increased number of "Introduction to Marketing" sessions were held for farm women.

Because of continuing strong cattle prices, the regional marketing economist devoted more time this past year to beef cattle marketing. While the Peace region generally has a poor reputation for the quality of its hay, much outstanding quality hay has been exported out of the region in the past. The Berwyn Marketing Club continued its activities this year.

Demand for water pumping equipment increased dramatically in 1988 with 308 dugouts filled between April 1 and September 1 as compared to 120 the previous year. The regional engineer, district agriculturists, and secretaries responded to requests for assistance under the Alberta Water Supplies Assistance Program. During the year, 771 applications for new dugouts and/or stock watering dams and 102 applications for rehabilitation of existing dugouts were received. Good run-off in the spring of 1989 may reduce demand for pumping equipment. The program has been rationalized by "farming out" more of the equipment to local municipalities.

Many Peace region producers required technical assistance from the regional engineer to set up ventilation systems required for indoor over-wintering of bees. Systems tried, included mechanical refrigeration, earth-tube modified air inlets and conventional fan-tube circulation exhaust systems. The regional engineer collaborated with colleagues in Edmonton and

British Columbia to produce an on-farm grain handling and storage layouts publication.

A major portion of the regional soil and water engineer's time in 1988 was devoted to inspection, survey and design associated with the soil conservation area program (SCAP) and farmland development and reclamation program (FDRP). Twenty-five new FDRP projects and 47 SCAP projects were inspected. The Peace region registered almost half of the provincial total for these two programs. Several agricultural service boards implemented application fees to ensure SCAP-FDRP applicants were fully committed. Service boards and municipal councils continued to express concern over piecemeal drainage of new farmland upstream resulting in flooding out established land owners downstream. Pilot sub-basin studies in the Spirit River and Fairview areas provided valuable models for a comprehensive approach to drainage and land development in the Peace. Addition of agriculture land at rates of up to 100,000 acres per year over the last decade introduced huge additional volumes of water to existing drainage systems.

4-H membership declined to 659 members in 46 clubs. Beef and light horse clubs continued to have the largest membership. A number of regional programs were sponsored during the year including a regional winter camp and as a regional summer camp. The latter was attended by 54 campers. An increased emphasis on leader training took place with leadership training programs held in several districts.

Green certificate activity increased in the region. An intensive training program aimed at Peace region trainers produced substantial results. The number of Level I certificates issued, for example, doubled. The number of trainees who left the program with a certificate increased from 36 per cent last year to 76 per cent this year.

Testing at Fairview College became a permanent part of the regional program.

The single largest demand on district agriculturists' time continued to be financial assistance programs, which created an additional 3,464 phone calls and 9,436 office interviews.

District agriculturist continued to host major sub-regional seminars. Canola seminars at locations around the region drew attendance of approximately 400. Major forage seed marketing seminars held at Spirit River and Peace River, in conjunction with the Alberta Forage Seed Council drew a combined total of 240 farmers. Each district agriculturist made an average of 196 farm calls over the past year. They also continued to provide agricultural commentary on subdivision applications. Increased economic activity in the Grande Prairie, Valleyview, and Peace River areas led to increased sub-division requests. District agriculturists also became more actively involved in the on-farm demonstration program with the regional budget for on-farm demonstration fully subscribed for the first time since the inception of the program in 1983. The single largest demand on district agriculturist time continued however, to be in the crops area, with more than 17,000 client contacts made.

All district home economists were active in the Explore Nutritious Alberta program again this year. School boards and administrators were very receptive and assisted in setting up many teacher in-services. Approximately 150 teachers, representing a majority of schools in the region, received instruction in both nutrition and Alberta food products.

A major Farm Women's Conference held in Peace River attracted the maximum 150 registrants.

Savor Alberta Flavor promotional programs were held in the Manning, Fort Vermilion and High Prairie districts. District home economists were involved in farm financial management. Farm calls, educational sessions in record keeping, decision making, and other aspects of finance were popular with farm families. District home economists in three districts piloted the "Understanding Profit" financial management home study program.

Several trends were evident in changes in district office activity. Increased grain prices, increased hosting of seminars and short courses, by private enterprise and other government agencies, and a changed statistical reporting method led to a slight reduction in attendance at short courses and seminars. Staff increased their number of newspaper articles from 602 the previous year to 666 in 1988-89. They also made 574 radio broadcasts, one television broadcast, and sent district and regional newsletters to approximately 6,000 clients. District agriculturists, district home economists and specialists continued to provide advice to agricultural service boards, agricultural development committees, 4-H councils, seed co-op boards, further education councils, producer groups and commodity organizations, etc. This required them to attend a total of 712 additional meetings.

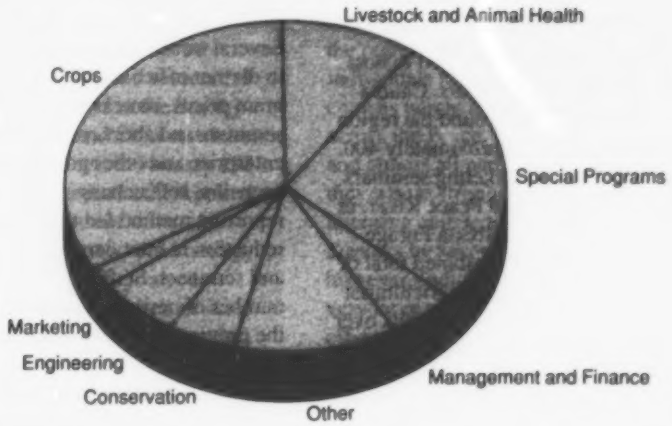
The video library service was expanded to seven of the region's 10 district offices during the past year.

A major tour for the Faculty of Agriculture staff from the University of Alberta took place during October. The tour heightened university staff awareness of the unique problems, issues, and opportunities for agriculture in Alberta's northern most region.

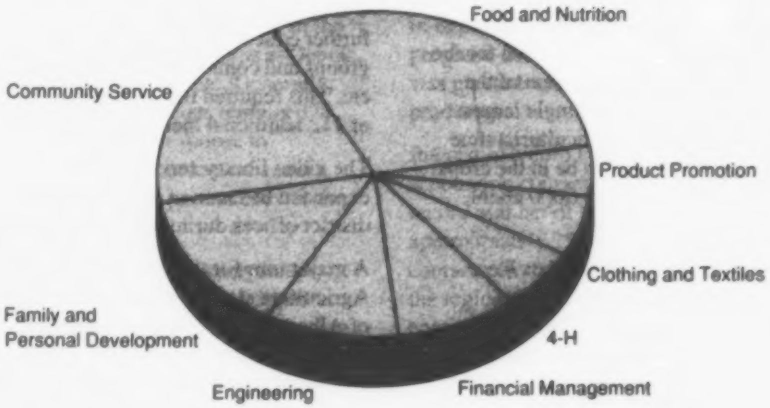
Number of Client Contacts

Office Interviews	22,529
Telephone Calls	25,527
Farm Visits	3,030
Educational Programs	456
Attendance	9,336

Region 6
Agricultural Client Contacts



Region 6
Home Economics Client Contacts



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MARKETING

The marketing sector of Alberta Agriculture continued to provide assistance to producers, processors and marketers in response to the needs of the agricultural industry of Alberta. Development and support services were provided to processors and marketers of agri-products with the objectives of adding value and improving the marketability of products of primary agricultural producers. Concurrently, efforts continued to be made towards securing and enhancing market access for Alberta's agriculture and food exports through appropriate adjustments in domestic and international commercial policy. The objectives of the marketing sector were fulfilled by:

- identifying and evaluating opportunities discovered in domestic and international markets
- co-ordinating and supplying services in response to market opportunities
- liaising with and utilizing private and public sector resources
- developing marketing strategies in response to the needs of private enterprises
- providing mechanisms for private sector input into departmental policy and planning
- expanding policy and services in support of the development of liberalized trade, increased market orientation and the operation of the principal of comparative advantage
- consulting with Alberta industry, government departments and other provincial governments to establish an effective position on the Canada-U.S. Free Trade Agreement
- renewing and extending financial support programs for the development of rural and urban food, and agri-processing value adding, research and marketing industries in Alberta.

Through its trade policy secretatiat, and rural development, market development and marketing services divisions, the marketing sector provided a wide range of programs and services in support of Alberta's agriculture industry during the 1988-89 fiscal year.

MARKET DEVELOPMENT DIVISION

In the fragile and volatile global economy, Alberta exports have shown a marked increase, particularly for value added/processed food products. The department's support to further that growth presumably had an influence on these significant results which were of benefit to all Albertans. All sectors of the department have made significant contributions to assist in achieving these most positive results.

Some highlights were evidenced in the following sectors:

- Livestock
- Canola
- Vegetables
- Food and Beverages

Free trade between Canada and the United States became a reality and efforts were underway to accelerate the tariff reductions in a number of areas. The implementation of this historic agreement was of tremendous significance to Alberta since approximately 65 per cent of Alberta's exports to the United States take the form of value added/processed foods.

Liberalization of import regulations in Japan was of great importance to Alberta, especially as it related to markets for Alberta's beef and food products.

Canadian Market

The preliminary estimated value for shipment of food and agricultural goods out of Alberta in 1988 was $3.4 billion, an increase of $600 million over 1987. This figure included an estimated $1.5 billion in shipments to other parts of Canada.

The market development division continued to pursue market opportunities in the Canadian market, focusing on Alberta, British Columbia, Quebec, and Ontario as priority markets. Projects included were processed foods and beverages, meats, feeds, and livestock.

Alberta

Marketing of food and agricultural commodities in Alberta remained a high priority. Alberta Agriculture supported the Alberta food industry with the introduction of a new program "The Opportunity is Now". This program assisted food processors in marketing their products within Alberta. Research conducted by A. C. Nielsen indicated a rise in sales and market share, which may be attributed to such programs. The above program included retail store promotions, foodservice trade contests, television and other media advertising. This was a joint undertaking of Alberta Agriculture and the Alberta Food Processors Association.

Market Development assisted 46 Alberta food processors to attend ARFEX '88 (Alberta Restaurant and Foodservice Exhibition). This show proved very successful in assisting Alberta food product entry to the foodservice market.

Five Alberta wine, beer, and distilling companies were assisted in their participation at GALA '88. This show assisted companies in gaining new product listing with the Alberta Liquor Control Board.

Savor Alberta Flavor, Alberta Agriculture's program directed at marketing food products to rural Alberta, increased awareness and sales in the rural market.

Alberta Agriculture continued to work closely with the canola industry in Alberta, in developing and expanding canola meal utilization by the livestock sector. This was a long-term effort geared towards import replacement.

For the first time, the Equi-Fair exhibition added a horse sales ring. Sale results to local and international buyers were positive.

Market development division staff continued to assist all local producer associations and food industry representatives in market planning and marketing endeavours.

British Columbia

The British Columbia market was a very accessible market for Alberta food products and commodities. In 1988, there were 52 companies marketing food products in this growing market.

Food Pacific '88 was enhanced by a Savor Alberta Flavor booth exhibiting Alberta's food products to the B.C. and export market.

Fourteen Alberta food companies participated in British Columbia's Restaurant and Foodservice show. Significant gains in the B.C. foodservice market occured as a result of attendance at the show.

Many Alberta companies were assisted in meeting with potential buyers and promoting their products in this important market.

Eastern Canada

In response to industry requests, the division continued to place importance on the marketing of Alberta beef and value-added grocery products in the large Eastern Canadian market, particularly Ontario and Quebec.

Beef

Quebec continued to be Alberta's single largest market for beef. Therefore, in an effort to maintain Alberta's market share with major clients and develop new business, regular market development trips were completed. These efforts reaped rewards as several new programs were developed which created an increased awareness of high-quality Alberta beef and resulted in increased sales.

A major wholesaler entered into a new program of using Alberta value-added, certified Grade A, cryovaced boxed beef, and regular weekly business resulted. This was the combined effort of a major Alberta packer, the Alberta Cattle Commission, and the market development division.

Quebec's largest retailer recently co-operated on a program of advertising "Alberta Superior Grain Fed Beef" in its weekly flyer. Increased sales have already been recorded.

A Quebec-Alberta beef food service promotion was held in March 1989, with a major hotel chain featuring *Le Boeuf de l'Alberta* (Alberta Beef) for the first time in Quebec. Prospects looked good for expanded business in other areas as well as provinces.

Incoming missions of key meat buyers from Quebec and Ontario foodstore chains continued in 1988-89. The Ontario market for Alberta beef continued to grow. One major retailer purchased approximately 50 to 60 per cent of its requirements from Alberta and another major chain had come "on stream".

Food Products

With the encouragement and support of the divisions, several Alberta food companies created awareness for their products and increased their sales in the vast Ontario/Quebec markets.

This was achieved, in part, by participation in several key food service and retail food shows, along with encouragement and support for market development trips into the Eastern Canadian market to call on key food service/retail buyers. Trade shows attended: Hostex, the Canadian Food & Beverage Show and the Canadian Grocery Showcase.

Livestock Genetics

Working in co-operation with the Alberta/Canada All Breeds Association, the market development division continued to encourage sales of Alberta livestock genetics through participation at the Royal Winter Fair in Toronto, the Canadian Western Agribition in Regina, and gave assistance to international programs held in conjunction with the Calgary Bull Sale, the Calgary Exhibition and Stampede, and Edmonton Northlands Farmfair.

In December, the market development division marketing services divisions, and the Alberta/ Canada All Breeds Association co-ordinated and hosted a very successful "Livestock Genetics in the 90's" Conference in Red Deer. Geared towards understanding the intricacies of international marketing endeavours, and involving some 150 producer and private industry representatives, the conference showed the potential of becoming an annual event, involving delegates from other markets.

Additional market development support, directed to individual associations and companies primarily in the form of incoming buyer programs and outgoing market development missions, led to significant sales of high quality breeding stock to Ontario, Quebec, Manitoba, Saskatchewan, and British Columbia.

United States Market

In 1988, the United States continued to be Alberta's largest foreign market for agricultural and food products. Alberta exports to the United States in 1988 were valued at over $597 million, an increase of 36 per cent from $440 million in 1987. The breakdown of sales was as follows: livestock at $277 million, meats at $109 million ($49 million beef and $4o million pork), canola oil at $28 million, and oats at $31 million. Other products totalled $152 million and included canola meal, forage seeds, whiskey, peat moss, and cereal grains.

The west coast market of the United States continued to be a prime market for Alberta food and agricultural commodities, with two-thirds of Alberta exports going to five states; California, Washington, Oregon, Alaska and Hawaii.

Access

The Canada-U.S. Free Trade Agreement was implemented on January 1, 1989. As a result, the first stage of the tariff phase-out took place on that date, increasing Canada's competitiveness in the U.S. market.

The division co-operated with other divisions of the department in assessing the implications of the Free Trade Agreement for Alberta's agricultural industry. In particular, the market development division concentrated on identifying market opportunities in the United States for Alberta products and commodities arising out of the agreement. The division also provided input into Alberta's position in the current round of Multilateral Trade Negotiations.

Grocery Products

In support of Alberta's objective to increase market access to the west coast of the United States, several new program initiatives were developed. Twenty-two companies were assisted to participate at a federal government sponsored NEBS (New Exporters to Border States) in Seattle, Washington, where they developed skills to enter that market. A seminar "Export Bound", conducted with top speakers from the west coast of the United States, was held for 55 Alberta food company representatives. Seven Alberta food companies presented their products to the retail trade in Seattle, Washington at an Alberta solo show. One company attended the Western Restaurant Show in Washington State.

For the first time, an Alberta company participated at the Western Restaurant Association Show. Also, two Alberta companies participated in monitoring the International Fancy Food and Confection Show in San Francisco. Another first was the participation of four companies at Natural Food Expo in Los Angeles. The participation in these shows was enhanced by organized meetings with trade contacts to identify brokers and distributors.

Investigative work by the market development division (via one-on-one consulting) assisted five companies to enter the California market for the first time, increasing the number to thirteen food processors in that market. In 1988-89, eighteen Alberta companies were in the Pacific Northwest, with twenty-one preparing to enter.

Beef

Another market development division priority was the support of a viable and expanding red meat industry.

Alberta beef seminars were held in Portland as part of a continued series of U.S.-Alberta beef seminars which were held previously for interested U.S. retailers, wholesalers and food service clients in Los Angeles and San Francisco. These successful promotional/educational seminars were the joint effort of a "U.S. Beef Team" consisting of interested beef packers, the Alberta Cattle Commission, Agriculture Canada, and Alberta Agriculture's market development division. Investigative work for expanded beef sales also took place in other markets. Meat packers were assisted in meeting with the California trade at the Western States Meat Association Annual Convention, which bolstered company and product profiles.

In October 1988, the market development division was part of a steering committee that addressed the quality concerns and aspects of Canadian beef and conducted a National Strategies III Seminar on Beef Quality. This seminar was attended by major players in the meat trade from across Canada and the United States.

Pork

The division continued to assist pork and processed meats suppliers with information and financial support to expand both domestic and U.S. markets. High quality, lean, well-trimmed Alberta pork became better known across the United States, along with Alberta packer brand names.

Livestock Genetics

The market development division, in co-operation with the Alberta/Canada All Breeds Association, continued to maintain a high profile in Alberta's largest market for high quality breeding stock. Extensive promotional activities were carried out at major livestock shows in Madison, Billings, Portland, Louisville, Denver and Houston. In addition, the Alberta/Canada All Breeds Association, the Calgary Exhibition and Stampede and Edmonton Northlands co-operated in promoting Alberta events and Alberta livestock to some 5,000 industry leaders at the National Cattlemen's Association Convention in Phoenix.

During the past year, the market development division and the Alberta/Canada All Breeds Association co-ordinated incoming buyer missions from the State of Florida, the Houston Livestock Show, the Intercollegiate livestock judging champion, show officials from Denver, and the winner of a trip to the Calgary Bull Sale, awarded at the National Cattlemen's Association Convention. Active promotions during the past year aided in securing the 1990 CIAGA Annual Convention, which represents cattle producers from 18 Latin American countries.

Oats

The market development division followed up on the potential markets for Alberta oats as identified in a 1987 study. California and Texas were targeted as priority markets. The value of oat exports during 1988 increased to over $31 million from $19.5 million in 1987. Additionally, a committee composed of representatives from the market development division, marketing services division, Grain Commission and the planning secretariat commissioned a study addressing oat marketing and processing development in Alberta. The market development division continued to provide support to the private sector in expanding and developing oat marketing opportunities.

Canola

The value of canola oil shipments during 1988 approached $42 million, an increase of more than 400 per cent from 1987. The market development division continued to support industry initiatives and follow-up technical seminars, capitalizing on canola oil's positioning as a product with significant health benefits. Processed product was in Washington, Oregon and California, while semi-refined oil moved into California, as well as Eastern and Central markets. Canola meal as a component of feed for swine, poultry and cattle continued to make inroads, with exports to Washington, Oregon, and California.

Others

Alberta held over six per cent of Washington State's market-share requirements for seed potatoes.

Peat moss sales continued to increase in west coast states and nursery stocks sales benefited from sizeable shipments to Alaska.

Forage seed exports contributed $17 million to the Alberta economy during 1988, however returns to producers, and demand for seed were affected by an over-supply situation and the extreme drought conditions in many U.S. states.

Latin America/ Caribbean Market

The significance of Latin America/Caribbean region continued to grow significantly in terms of its importance to Alberta's exports of agricultural products. Mexico continued as the number one market in this region. Colombia, Venezuela, Chile, Argentina, Brazil and Cuba offered substantial opportunities as well. The major commodity priorities were ranked as follows: livestock genetics, canola, specialty crops and forages.

Mexico was by far the most important market in the territory with over $37 million worth of Alberta agriculture products sold there. Canola seed and oil sales made up the majority of this total, with wheat, livestock genetics, edible offals and hides, in that order, making up the balance. Sales of livestock genetics showed the biggest increase, as sales of purebred breeding stock doubled. This was attributed to the aggressive marketing promotions conducted by the Alberta/Canada All Breeds Association and other Alberta companies in the central and northern states of Mexico, as well as the goodwill created by the Alberta-Jalisco bull testing program.

Canola seminars were held throughout Mexico to maintain a high profile, as well as to update the Mexicans on the latest research on canola oil and meal.

Alberta Agriculture helped a number of Alberta companies attend major trade and livestock shows in South America. As a result, the first Alberta livestock (Angus cattle) were sold to Chile. This sale could broaden the market base for other commodities such as semen, embryos, grain seed and forages.

Colombia was a good customer of Alberta's livestock genetics. Three Colombian buying missions in 1988 resulted in significant sales of Alberta purebred stock, and prospects appear positive for future exports.

As animal health protocols become established, a strong market for embryos will be established in Venezuela, Brazil, Argentina, Chile and Colombia.

Opportunities for a variety of specialty crops such as beans, lentils and pearl barley existed in a number of northern countries of South America.

Europe, Africa and Middle East Markets

In Eastern Bloc countries, the Middle East and Africa, direct participation by the supplier or project developer became an expected requirement to doing business. Participation took the form of a joint venture or counter-purchase agreement, both of which required non-traditional and innovative approaches for their success.

Inroads were made through a joint venture production and marketing project in force between Alta Genetics Inc. of Alberta and a Soviet co-operative farm. This project provided the Soviet Union with a base of Canadian Holstein genetics obtained through the purchase of frozen embryos.

Other types of joint ventures in both eastern Europe and the Middle East were under negotiation.

Non-tariff barriers, such as the European Communities' ban on beef products produced with the aid of hormones, virtually stopped the export of beef and related by-products from Canada to this market. To gain a better understanding of the European Common Agricultural Policy, the negotiations taking place under the General Agreement on Tariffs and Trade, and how the formation of the single community, scheduled for 1992 in Europe, will affect Alberta companies marketing into Europe, Alberta's Minister of Agriculture visited key players in each of these sectors. The information gained during this mission will assist Alberta in formulating its trade strategy.

Alberta firms continued to gain market access and increased market share in both Europe and the Middle East for the following products: honey, dehydrated alfalfa cubes and pellets, double-compressed baled hay, double-cleaned heavy oats, deheated mustard powder, mustard seed, faba beans, field peas, dairy and beef genetics in the form of live animals, embryos and semen, and leisure horses. Missions visited the U.S.S.R., Hungary, Czechoslovakia, Spain, Portugal, the United Kingdom, Yugoslavia, Bulgaria, Finland, Sweden, Holland, Denmark, Italy, France, Germany, North Yemen, Saudi Arabia, Israel, Iran, the United Arab Emirates and Turkey. In addition, East Germany and Poland were visited by Alberta private sector companies with market development division assistance.

In the Middle East, negotiations began to establish an Alberta Products Centre in Abu Dhabi. This centre, when opened, will provide an ongoing presence in the Middle East for Alberta companies to present, service and follow up on sales to this market.

Assistance was provided to introduce Scandinavian technology that uses barley as a feed stock in the production of industrial products used in the food, feed and paper industries.

Pacific Asia Market

The Pacific Asia region represented over one half of Alberta's agricultural exports.

Japan is Alberta's largest customer in this market place. The announcement of Japanese trade liberalization for food products was made in 1988.

The market development division worked closely with Alberta meat processors, packers, exporters and the Alberta Cattle Commission (representing the producers) to develop a self-reliant industry organization to address the market opportunities presented by the liberalization of the Japanese beef market. The formation of the Canadian Meat Export Federation facilitated a co-ordinated effort in penetrating new markets, and will provide a commitment in terms of quality and reliability in foreign markets.

Alberta exports to the People's Republic of China increased in 1988.

Wheat and barley remained the major commodities shipped from Alberta, however, missions from China have indicated an interest for livestock genetics and management services.

South Korea has also announced the liberalization of rules regarding food imports. Alberta beef missions to Korea indicated the potential to develop this market in the near future is positive.

The University of Alberta and Olds College met with their respective counterparts in Korea to initiate programs of mutual benefit and co-operation. These programs will provide valuable exposure for Alberta's livestock genetics, forage and feed products and management industries.

The establishment of an Alberta Trade Office in Taiwan in 1988 provided Alberta with additional support to develop this market place.

Missions to South East Asia identified opportunities for Alberta's feed industry, livestock genetics and consulting services.

Missions were completed to Japan, China, South Korea, Hong Kong, Taiwan, Singapore, Thailand, Indonesia, Malaysia and Oceania by the private sector and market development trade directors.

The opportunities to diversify and expand the Pacific Asia marketplace for Alberta's agriculture products and services required the dedicated efforts of producers and processors and Alberta Agriculture's support.

MARKETING SERVICES DIVISION

Agri-Food and Processing Development Branch

The agri-food and processing development branch provided assistance to commodity groups, food processors and individual entrepreneurs for the purpose of improving the marketability of agricultural commodities either directly or through processing into value-added products. The branch provided technical information and financial assistance in support of industry development projects.

The branch completed an industrial development strategy aimed at attracting new investors, entrepreneurs and world class food companies to the province.

Commodity Development Section

The commodity development section continued to foster effective self-reliant commodity and livestock breed organizations. The section acted as a communication link between these organizations and various levels of government, and provided technical and financial assistance.

Assistance was provided to the Canola Growers Association and the Pulse Growers Association to assist them in establishing commissions with refundable check-offs. Several other crop associations started to pursue the concept of refundable check-offs. Development of marketing plans involving forage seeds, canola oil and meal, hay, processed forages, vegetables, and other horticultural crops were undertaken with these industries. Several on-going initiatives encouraged development and more effective marketing of special (alternative) crops and determined what further value-added products might be derived from Alberta's surplus grains.

The proposed removal of oats from the Canadian Wheat Board, effective August 1st, stimulated considerable interest in further processing and marketing opportunities. The commodity development section was involved in commissioning a study of oat marketing and processing opportunities.

Administration of the Forage Seed Council was handled through this section. The council was active and good progress was made in dealing with forage seed priorities.

The farmers' market program was further reviewed and streamlined, and 101 markets continued to serve as effective direct marketing outlets for Alberta farm products.

Alberta continued to be recognized as a world class supplier of livestock genetics and related technology. The United States, Australia, Mexico, the U.S.S.R. and other international markets continued to provide export opportunities for our livestock semen and embryos. The commodity development section assisted 23 cattle breed associations, 16 horse breed associations and 24 other livestock organizations in building Alberta's reputation as a supplier of superior genetic material and related technology for world markets. The section played a leading role in organizing the conference, "Livestock Genetics for the 90s."

Processed Food Development Section

The section provided technical and financial support to food and beverage processors in Alberta. Professional assistance was directed at the overall development of the industry in the areas of packaging, labelling and market planning and the development of new and improved products. Companies were contacted for participation in trade shows, missions and were advised of foreign market opportunities.

Contact was made with approximately 375 new food processors who were seeking advice and guidance on the establishment of new ventures. In excess of 650 contacts were made with existing food and beverage processors and 98 grants were issued to Alberta companies in support of initiatives under the agri-food and processing development assistance program.

Section staff assisted the Alberta Food Processors Association (AFPA) through committee involvement and the promotion of AFPA programs. Grant assistance was provided to AFPA through the agri-food and processing development assistance program.

An updated directory of Alberta's agricultural processors was published and widely circulated throughout the industry in Alberta, Canada and internationally. A study on specialty poultry processing was commissioned, and financial support was provided for an ungraded beef study co-ordinated by the Canadian Cattlemen's Association.

The Dairy Research Chair at the University of Alberta was supported as was the Milk Promotion Program.

Process Engineering Section

The process engineering section provided technical support to the agricultural food and beverage processing industries in Alberta.

Projects handled by the section included new alfalfa compaction techniques, extrusion technology for cereal products, canola crushing plant automation, prepared meats processing, spice and essence extraction, and materials handling development for a pasta operation.

The section contributed to the industry development strategy prepared by the branch. In general, the section continued to be involved with projects that were either progressing toward the establishment of a production facility in the province or being examined in detail as to their potential economic and technical feasibility.

Some of the special projects undertaken were:

Livestock By-Products: Opportunities were investigated for the recovery of bone chips, gelatin and collagen from meat and hide processing plants.

Oats: With the planned removal of oats from the jurisdiction of the Canadian Wheat Board, feed and food processing developments were pursued especially in the area of new technology.

Phytopharmaceuticals: An investigative study was initiated with the University of Alberta to ascertain if pharmaceutical crops could be competitively grown and processed in the province.

Starch: The section continued to pursue the development of a plant to fractionate wheat or barley to paper and food-grade starch, and livestock feed.

ASSISTANCE PROVIDED UNDER AGRICULTURAL GRANTS ACT

Sector	No of Grants	Total
Processed food development section	91	$ 835,503
Process engineering	14	53,787
Crops, horticulture and feedstuffs	27	355,673
Cattle breed associations	23	273,191
Horse breed associations	16	103,308
Livestock, semen and embryo companies	6	42,000
Other livestock associations, shows and congresses	18	335,400
Farmers markets	60	49,841
Total	255	$2,048,703

Business Analysis Branch

The business analysis branch continued its emphasis on providing business and financial management services to departmental programs and to the agribusiness sector in Alberta.

Financial analysis and inspection activity under the Canada/Alberta Subsidiary Agreement on Agricultural Processing and Marketing (APMA) continued to be a major priority with the branch. The APMA program is a federal/provincial initiative which can provide financial assistance to existing or prospective processors for:

- capital projects,
- feasibility studies, and
- research and development activity.

The business analysis branch in conjunction with the branch's federal counterparts in the Western Economic Diversification office completed evaluations that resulted in 99 offers of assistance ($7,302,075 of support on $34,918,281 of approved costs). In addition, 131 inspections were completed, resulting in program disbursements totalling $6,016,802.

Other program related work included:

- analytical support to the community services branch with respect to the evaluation of Agricultural Society proposals for capital assistance
- the evaluation of two requests for provincial loan guarantees under The Department of Economic Development and Trade Act
- input into the design and implementation of new programs, and
- the evaluation of a number of project proposals on behalf of other program administrators.

In respect to direct management support to the agribusiness sector, the branch was involved in a variety of projects including:

- support to agricultural-related crown corporations, primarily in the areas of planning and budgeting
- assistance in the evaluation of capital project alternatives, and
- consultative support to new and developing agribusiness firms on financial management issues.

Food Laboratory Services Branch

The food laboratory services branch carried out programs to ensure the safety, quality and nutritional value of Alberta's food and agricultural production at the producer, processor, exporter and consumer levels. The branch, through its laboratory in Edmonton, provided analytical and advisory services not only to the Alberta food industry but also to various government branches concerned with food production, processing, inspection, transportation, export and retail trade.

The laboratory continued testing of Alberta food products and other agricultural commodities for the presence of pesticide and PCB residues. All random samples examined were found to be at an acceptable level.

In response to the Alberta food industry and the consumers' concerns to recent publicity related to new food-borne, illness-producing micro-organisms, the laboratory established a "special projects" unit to develop new analytical techniques and to survey Alberta food products for the presence of new bacteria.

The food laboratory services branch received 676,549 samples of milk and milk products, meat, honey, and various other foods. A total of 2,631,235 analytical procedures were performed on these samples. The accompanying table indicates the number and type of samples received at the Edmonton food laboratory and the number of analyses performed during the 1988-89 fiscal year.

SAMPLES RECEIVED AND ANALYSES PERFORMED BY THE FOOD LABORATORY SERVICES BRANCH APRIL 1, 1988 TO MARCH 31, 1989

	Samples Analysed		Analyses Performed	
	88-89	**87-88**	**88-89**	**87-88**
Milk	26,663	24,843	157,920	165,741
Butter	191	120	967	779
Cheese	924	2,129	4,165	8,700
Ice cream	2,076	3,347	4,551	7,542
Dry milk	20	129	60	163
P.P. Survey	813	909	3,355	3,842
Honey	496	693	1,665	1,705
Washing agents	2	8	5	29
Water	328	749	1,047	2,250
Eggs	1,218	1,614	1,789	1,876
Meat	1,844	2,062	8,120	9,030
Vegetables	364	654	1,455	1,983
Fish & Wildlife	184	331	924	1,679
Cereal products and forage	375	418	1,622	1,653
Human specimens	40	50	40	51
Soil	115	149	125	157
Research and collaborative studies	436	208	466	300
Miscellaneous foods	1,242	2,431	5,815	9,565
Central milk testing	639,218	631,953	2,437,144	2,143,945
TOTALS	676,549	672,797	2,631,235	2,360,990

The following table illustrates the number of samples submitted to the food laboratory and number of analyses performed during the past five years.

SAMPLE SUBMISSIONS AND ANALYSES PERFORMED

	Samples ('000)	**Analyses ('000)**
1984	664	1,460
1985	670	1,972
1986	686	2,365
1987	672	2,360
1988	676	2,631

Food Processing Development Centre

The food processing development centre pilot plant and laboratory facilities concentrated on industrial initiated projects that upgrade product/process technology, product marketability and processing efficiency.

The processing development section provided a fully-serviced, pilot plant processing facility, which enabled food processors to develop and evaluate innovative products and processes. Limited production of products was also completed for Canadian and international test markets and consumer acceptance studies. The major programs of the pilot plant process development section included the following activities:

- A production run of four tonnes of potato products was produced for the Japanese market.
- A calorie reduced pet "treat" product was developed and processed at the centre.
- Pilot plant, prototype production was developed for lipid-substituted products (preserved pork sausage, flavoured bacon, pre-cooked roasts).
- Product and process development of flavored chicken wings for an Alberta processor led to product commercialization.
- Product and process development of marinated beef product prototypes were completed and packaging was obtained.

- Cured and smoked ham and bellies from both control and experimental carcasses were evaluated in conjunction with Agriculture Canada and the Lacombe Research Station at the pilot plant.
- Priorities within engineering services focused on in-house processing, improved process control, material handling systems and operation and maintenance advice for processors.

Laboratory facilities and staff resources of the product development section of the centre continued to focus on providing a scientific and technological infrastructure to Alberta's food processing and beverage industries in product/process development and improvement in response to market and business opportunities. The section directed developmental programs in the area of product development and improvement, packaging technologies applications, and sensory evaluation. Major areas of laboratory support and services included concept development and analysis, prototype product design and demonstration, formulation optimization, finished product specification, shelf-life testing, packaging effectiveness, and quality assurance.

Laboratory personnel assisted over 100 Alberta food processors and responded to 125 project requests for new or improved product development. Examples of product development projects:

- Development of specialty mustard products for international market opportunities
- Design and development of a variety of jam and jelly formulations for industrial clients
- Development of high fibre food products for the geriatric market
- Development and commercialization of honey-based food products
- Formulation design of a specialty seasoning mix for franchise distribution
- Development of a variety of flavored dairy spreads.

Laboratory staff continued to provide expertise and leadership in packaging technology applications and shelf-life extension technology. Industry interest in modified atmosphere packaging technology have included meat products, bakery goods, prepared sandwiches, fresh pasta, salads and fresh produce. The sensory evaluation laboratory and test kitchen facility conducted 103 internal and 24 external taste-panel presentations in conjunction with product development and consumer market assessment commitments.

The centre continued to provide a technical advisory and information service which involved the acquisition, interpretation and adaptation of scientific and/or technical information to resolve specific industrial problems or to clarify product or processing opportunities for local and international markets. In-plant technical assistance to processors either in troubleshooting or consulting was carried out throughout the year.

RURAL DEVELOPMENT

The Canada-Alberta Agricultural Processing and Marketing Agreement (APMA) is administered by the rural development division. This agreement succeeds the Canada-Alberta Nutritive Processing Agreement (NPA).

In 1988-89, APMA provided direct financial incentives to agriculture and food value-adding and research projects in Alberta. The agreement supported the priorities of increasing the profitability of primary producers, and agriculture and food processors. There were 89 APMA payments totalling $5,315,460.69 were made. Another $4,122,620 remain on accounts payable and will be dispersed in 1989-90.

An additional 42 payments were made under NPA totalling $701,341.89. A further $872,770 remain on accounts payable and will be paid out in 1989-90.

The offers of assistance totalled $7,302,075. These offers represented 98 different projects totalling $35 million in private investment and 616 direct jobs across Alberta.

In addition, Alberta offers totalling $9,853,243 and representing $54,288,063 in private investment were made to six projects under the terms and conditions of the program.

NUTRITIVE PROCESSING AGREEMENT (NPA) PAYMENTS

Meat	$74,904.00
Feeds	$123,543.34
Bakeries	$33,511.00
Dairy	$48,348.00
Vegetables	$9,529.00
Rapeseed	$6,385.00
Alfalfa	$228,803.80
Research	$18,768.00
Misc.	$157,549.75
Total	$701,341.89

OFFERS MADE UNDER THE CANADA-ALBERTA AGRICULTURAL PROCESSING AND MARKETING AGREEMENT

	No. of Offers	Private Investment	Assistance Offered
Alfalfa		$1,667,196	$452,067
Bakery	14	$1,454,567	$264,705
Canola	2	$2,074,815	$511,544
Dairy	7	$1,613,224	$343,118
Feeds	9	$3,389,648	$507,112
Meat	19	$4,179,802	$826,289
Misc.	29	$16,310,092	$3,721,053
Vegetables	7	$1,153,115	$325,821
Genetics	1	$35,865	$8,966
Containers	1	$912,000	$91,200
Seeds	6	$2,122,957	$250,200
Total	98	$34,918,281	$7,302,075

CANADA-ALBERTA AGRICULTURAL PROCESSING AND MARKETING AGREEMENT 1989 PAYMENTS

Alfalfa	Capital	$1,881,192.00
Bakeries	Capital	$181,613.91
Dairy	Capital	$508,744.00
Dairy	Feasibility	$14,754.00
Feeds	Capital	$288,583.00
Genetics	Capital	$8,511.00
Genetics	Research	$290,879.00
Labels	Capital	$16,056.20
Meat	Capital	$758,487.45
Seeds	Capital	$50,052.23
Vegetables	Capital	$445,875.00
Misc.	Capital	$870,712.90
Total		$5,315,460.69

TRADE POLICY SECRETARIAT

The trade policy secretariat worked towards ensuring the establishment of an effective trade policy framework under which Alberta's agriculture and food industry can grow and prosper. This involved seeking to secure and enhance market access for Alberta's agriculture and food exports through appropriate adjustments in international commercial policy and in those domestic policies which significantly effect trade relations.

The secretariat was involved in making more than 60 presentations on the Canada-U.S. Free Trade Agreement, the Multilateral Trade Negotiations and other trade policy issues, to producer groups at trade seminars and other interested groups in Alberta, other provinces and internationally. The secretariat worked on domestic policy issues related to subsidies and interprovincial trade, including tripartite stabilization programs.

The secretariat remained active in the development and management of relations with other trade policy jurisdictions. This included participation in the Federal-Provincial Agriculture Trade Policy Committee, which meets regularly to review agricultural trade policy developments, exchange information, provide provincial input to the federal government and address specific trade issues and their possible resolution. A major undertaking of the committee during the year was the initiation of work on interprovincial agricultural trade barriers which will lead to recommendations for their reduction or removal. Through this federal-provincial committee, the secretariat also took part in the activities of the Provinces-States Agricultural Accord which serves as the vehicle for consultation between Canadian provincial and U.S. state departments of agriculture with a view to exchanging information, increasing mutual understanding and resolving existing or potential bilateral agricultural trade irritants.

The secretariat focused on over 22 specific issues and irritants during the year, including a U.S. review of the countervail duty on live hog imports from Canada, a GATT ruling on Canada's countervailing duty on beef imports from the European Community, the Canadian embargo on U.S. honey bees, the effect of the U.S. export enhancement program on Canada, and the evolution and potential impact of the U.S. Omnibus Trade Bill.

GATT Multilateral Trade Negotiations

The secretariat has been involved in developing and representing Alberta's agricultural position as part of the co-ordinated Alberta government approach to the General Agreement on Tariffs and Trade (GATT) negotiations. This required participation in federal-provincial consultations at the officials level and the preparation of briefs and strategy recommendations for use at Ministerial and First Ministers levels. The secretariat also co-operated with the three other western provinces to develop position papers for the GATT negotiations to influence the federal government to fully consider issues of importance to Western Canada such as the place of the western livestock and red meat sector in the negotiations. Speaking engagements were undertaken to inform producers, processors and rural Albertans about the direction of the multilateral negotiations and their implications for Alberta producers, as well as the impact and market opportunities arising from the Canada-U.S. Free Trade Agreement.

Canada-United States Free Trade Agreement

The implementation of the Free Trade Agreement (FTA), on January 1, 1989, involved a number of issues which remain to be resolved and made operative, such as the establishment of working groups on technical issues, negotiations on implementing the accelerated tariff removal provision of the FTA, and future negotiations on the domestic subsidy and countervail legislation of both countries.

The secretariat acted as the focal point for handling all trade-related litigation, trade irritants and trade-relation issues in agriculture and food products from a policy perspectives. Examples include:

United States Countervail Action Against Canadian Pork

On January 5, 1989, the National Pork Producers Council (NPPC) of the United States filed a petition against Canadian fresh, chilled and frozen pork. A preliminary determination of subsidy and material injury was made by the U.S. legal system. As well, this was the first agricultural case to which provisions in the U.S. Omnibus Trade Bill will be applied. Study of the GATT and FTA implications of this action are varied and important, requiring intensive work by the secretariat in collaboration with other industries and between various governmental departments.

The secretariat was active in preparing the Alberta responses to the U.S. Commerce Department questionnaires, monitoring the case and dispensing information to the department's senior management and the Canadian industry. This work was done co-operation with the Federal Department of External Affairs.

European Community Ban on Hormone Treated Beef

On January 1, 1989, the European Community (EC) imposed a ban on meat from animals raised with growth hormones. This ban had direct and indirect impacts on the Canadian and Alberta industry. The secretariat monitored developments and made representations to the Federal Government to ensure that Alberta producers' interests are given full regard.

Other Issues

The secretariat relayed Alberta policy concerns and issues to the Federal Government and to the market development division on issues such as disputes/argreements between countries' regulatory and administrative measures which affected Alberta trade. Anticipation of developments affecting Alberta Agriculture and food trade was an important element of the secretariat's brief.

The secretariat worked closely with other department staff on matters relating to policies having a direct or indirect impact on trade. For example, the staff provided advice and input on the activities of the committees working on the red meat tripartite agreement and the alternative income support measures.

APPENDIX

ACTS ADMINISTERED BY ALBERTA AGRICULTURE

Agricultural Development Act
Agricultural Operation Practices Act
Agricultural Pests Act
Agricultural Research Institute Act
Agricultural Service Board Act
Agricultural Societies Act
Agrologists Act
Animal Protection Act
Artificial Insemination of Domestic Animals Act
Bee Act
Beet Lien Act
Brand Act
Crop Liens Priorities Act
Crop Payments (Irrigated Land Sales) Act
Dairy Board Act
Dairy Industry Act
Department of Agriculture Act
Farm Implement Act
Federal-Provincial Farm Assistance Act
Feeder Associations Guarantee Act
Fur Farms Act
Hail and Crop Insurance Act
Harvesting Liens Act
Horned Cattle Purchases Act
Irrigation Land Manager Act
Line Fence Act
Livery Stable Keepers Act
Livestock Diseases Act
Livestock Identification and Brand Inspection Act
Livestock Injury Act
Livestock and Livestock Products Act
Margarine Act
Marketing of Agricultural Products Act
Meat Inspection Act
Seed-control Areas Act
Seed Grain Purchase Act
Soil Conservation Act
Stray Animals Act
Surface Rights Act
Threshers' Lien Act
Vegetable Sales (Alberta) Act
Veterinary Profession Act
Water Resources Commission Act (Joint)
Weed Control Act
Wheat Board Money Trust Act

WHEAT BOARD MONEY TRUST ACCOUNT

Balance Sheet as at March 31, 1989 (unaudited)

ASSETS	1989	1988
Cash	$ 61,620	$ 65,716
Accrued interest	1,420	1,428
Investments	52,993	52,992
	$116,033	$120,136
UNEXPENDED FUNDS	$116,033	$120,136

Statement of Revenue, Expenditure and Unexpended Funds for the Year Ended March 31, 1989 (unaudited)

REVENUE	1989	1988
Interest and amortization of discounts	$ 9,697	$ 9,240
EXPENDITURE		
Scholarships and bursaries	13,800	13,800
Excess of expenditure over revenue	4,103	4,560
Unexpended funds at beginning of year	120,136	124,696
Fund equity at end of year	$116,033	$120,136

Authority

The Wheat Board Money Trust Account operates under the authority of the Wheat Board Money Trust Act, Chapter W-7, Revised Statutes of Alberta 1980.